THE LANCET.

LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND DISEASES OF THE EYE.

By MR. LAWRENCE.

London Ophthalmic Infirmary, Moorfields.

Lecture XX.

Affections of the Eyelids.—Affections of the Cornea.

Gentlemen,

You will meet with two long Greek names applied to two states of the eyelids. *Ancylo-blepharon* is a preternatural union of the two lids; I believe that they have been found thus united, in some instances, as a congenital malformation; but I have not seen such an occurrence. It is usually the result of ulceration; if the opposed margins are both ulcerated at the same time, they may grow together. In this way you will see partial union produced at the external angle, in old cases of lippitudo, where there has been frequent inflammation and excoriation, considerably shortening the palpebral slit, and inconvenient in the operation of extraction, by preventing a sufficient exposure of the globe. This state cannot be remedied; indeeed I never saw it existing to a degree requiring any remedy. If there were congenital union of the lids, as we sometimes find in the anus and labia pudendi, with no other defect, they ought to be separated by incision, taking the necessary care not to wound the globe.

The term *sym-blepharon* denotes a connexion of the lid to the globe of the eye; and this is generally the consequence of accidents, in which caustic substances, such as lime or mortar, are brought into contact with the conjunctiva of the lid and of the globe; or when, by any cause whatever, ulceration of the two opposed conjunctival surfaces is produced. The granulations which shoot up from the two ulcerated surfaces inosculate, and a permanent adhesion is produced. When the surfaces are extensive, it is impossible to prevent their accretion, even if you see the case from the beginning; at least I failed completely in a case where the lower lid and globe were thus injured by mortar, and where I took every pains to prevent the parts growing together. The accretion varies in extent and firmness; you may have a close and firm union of the entire lid and globe; or there may be merely slender and loose bridles of connexion; or any intermediate degree between these. The slender frœna may be divided and dissected off, if there be any useful purpose to be accomplished; and there would be no difficulty in separating the more extensive and close connexion; but the constant apposition of the raw surfaces reproduces the union, so that the inconvenience may be considered irremediable.

Tumours of the Lids.

The lids are subject to a variety of tumours. You may find *encysted* tumours formed in the lids, immediately under the skin, external to the orbicularis; you may have them under the orbicularis, or they may be fixed and making an impression on the external angular process of the frontal bone. They require to be removed, if they are large enough to be conspicuous, and should be increasing. In operating you should attend to the direction of the incision in the integuments, so as not to run the risk of producing any subsequent deformity. I have seen individuals in whom the tumours have not increased for many years, and I should only advise their removal when they are found to increase in size. I have been generally called on to remove these tumours in females, who have been anxious to get rid of what they considered a blemish.

The lids, and particularly their ciliary margins are subject to the formation of tumours, which may be called half-encysta-

ted, containing a white milky matter. They appear first as a small smooth wart, with a flattened surface, and a small pin-hole in its centre; they gradually increase in size to that of a pea, a horsebean, or the end of the finger. Pressure will squeeze out a little soft white matter from the central opening. They sometimes inflame; the aperture enlarges, and the cavity of the cyst is exposed, as an irregular fibrous surface, producing a copious discharge, with surrounding inflammation and excoriation. There is generally more than one, and often they are numerous in both lids; they are also seen in other parts of the face, but less frequently. The easiest mode of removing them is to split them in two with a small sharp knife; you may then with a forceps take hold of the divided halves and pull them gently out; you will find that a very little force is sufficient to separate the loose cellular adhesions of the tumour to the surrounding parts. You will find the unnatural growth lobulated on the surface, soft and whitish, and having a small cavity in its centre. In this mode of proceeding, no skin is removed. Lay a soft rag dipped in cold water over the eye, and keep it damp; the part heals readily, and no mark is left. If it should have begun to ulcerate, it will be sufficient to take a caustic pencil and touch the surface of the imperfectly formed cyst, the tumour then drops out in a day or two; sometimes it is spontaneously detached under the inflammatory action, and the surface heals.

The lids are very liable to the formation of tumours, which seem to grow from, and at least are connected at their basis to the cartilage; they may be called tarsal tumours. They grow from the tarsus, and form small external swellings, sometimes reddish coloured, on the lids. They are covered externally by the integuments and the fibres of the orbicularis palpebrarum. They seldom grow larger than a pea or bean, and do not give much trouble, except producing a sense of heaviness in the lid, and sometimes by projecting inwards, mechanically irritating the globe. If you invert the lid, and particularly the upper, you will see the part of the tarsus from which the tumour rises; the cartilage is rendered thin at that part, and you see distinctly the circular base of the tumour. The contents of such tumours are various; sometimes there is a vascular tissue, there is obvious redness, and the production is inflammatory; sometimes you meet with imperfectly formed pus, and the case may be considered as a small chronic abscess of the lids; sometimes there is a glairy fluid. The general rule given for operating on tumours of this kind is that you should cut down through the skin and fibres of the orbicularis, and dissect them out; this is a painful operation, and cannot be strictly executed, as you cannot insulate the basis from the tarsus; if you were to separate it entire, you must cut through the cartilage, and thus make a button-hole in the lid. However this external incision and dissection are unnecessary, all you have to do is to invert the lid, then, seeing the base of the tumour through the thin portion of the tarsus, puncture it with a sharp-pointed double-edged knife, and the pus, or glairy fluid, or whatever else it may contain, escapes; you need then do nothing more, the cavity contracts, and the place soon heals. But, supposing the tumour not to contain fluid, but to be of a vascular texture, then you should make another incision, at an acute angle to the former, so that you have a little flap produced, which you cut out with the scissors; then break down the soft texture with a probe. In a few days a soft kind of fungus projects, which you cut off with the scissors, and the part heals.

Sometimes there are tumours, which form upon the inner surface of the eyelid just upon its orbital edge, where they are merely covered by the conjunctiva. If you invert the lid, you can remove them very easily, transfixing them with a hook and drawing them out. It is always better to do these little operations on the inside than from the outside, if you can; there is less to be cut through, and less risk of any unpleasant scar, or altered figure of the part.

There is mention made of an indurated tumour occurring upon the edge of the lid, called *chalazion* or grando, words from the learned languages, denoting hail stones, to which the indurated tubercle in question is compared. I believe that it is merely the result of hordeolum, and may be expected gradually to disappear.

You may have small white tumours occurring on the ciliary margin of the lids. Sometimes they are about equal to the head of a large pin, or they may be rather larger. They consist of a very thin but dense membrane, containing a soft substance nearly like boiled rice. These are called milia. They cause no inconvenience, when they remain stationary, and attain only a limited size; they generally occur in elderly persons. If their appearance is disliked, they are easily removed by transfixing them with a hook, and cutting them out with scissors. The same observations are applicable to small watery vesicles of the ciliary margin.

Tumours seated in the Orbit.

The analogy of the subject leads me to mention the occurrence of tumours within the orbit, and they form in the same way in the cellular texture of the orbit, as in other parts of the body. There are sarcomatous and encysted tumours, the latter being more common than the former. The encysted kind may contain watery fluid, various thicker matters, so as to deserve the technical epithet of melliceris or atheroma, and I have seen an instance in which the cyst contained a large collection of hydatids. Tumours forming in the orbit are important, because from the limitted space in which they have to grow, they very much interfere with the other contents, and often seriously injure the globe of the eye. They generally form deep in the cavity, and often produce considerable pain from the beginning. As they increase they cause impaired vision or complete amaurosis, by pressing on the optic nerve or globe, or pushing the latter outwards, and then stretching the former. Then augmenting in size they thrust the globe out of the orbit; producing the state called ex-ophthalmia. When a tumour exists in the orbit you are sometimes hardly aware of its presence, until it begins to produce an amaurotic state of the organ; and finding no other sufficient cause for this condition of the globe, you are led to suppose the existence of a tumour. When from the prominence of the globe and the impaired state of vision, you have been led to suspect the existence of a tumour, you more closely examine the part, and you can perhaps feel it through the palpebra. When you have ascertained that a swelling exists, and have determined that it is a fit case for operation, you must dissect it out with as much care as possible from the surrounding parts. In some instances, when the tumour is large, you will find it necessary to resort to the expedient of slitting up the external canthus of the eye, as in the operation for extirpation of the globe. It is an embarrassing kind of operation; you are impeded in the performance of it by the flow of blood, which fills up the cavity; you are obliged to proceed slowly. After you have succeeded in removing the tumour, the patient must be kept perfectly quiet and avoid all the causes of inflammation. I said that I had seen a cyst containing hydatids formed in the orbit; it was in a patient, who came to the Infirmary, complaining of considerable pain and distention in the orbit with dimness of sight; the globe of the eye was a little projecting, and on examination I thought I could discover the existence of a tumour in the upper part of the orbit. It was represented to him how the case stood, and he was informed that the only effective mode of relief would be the removal of the tumour; but at the same time the operation was not much encouraged from the uncertainty of its consequences. The patient went away, and in twelve months he returned, with a more decided projection of the globe and a visible prominence under the upper lid. I thought I could distingnish a fluctuation in the tumour, and it was proposed to puncture it and see what it contained. I punctured the tumour with a lancet, when about a table spoonful of clear watery fluid escaped, which gave relief to the patient. In about a week afterwards I saw something, when the patient came again to the Infirmary, hanging out of the opening, I took hold of it by the forceps and drew out a hydatid of considerable size. In a few days some more came out, after which I injected some tepid water into the aperture, and thus brought out half a tea cupful of hydatids of various sizes. The cyst inflamed and suppurated, then collapsed and closed. The eye returned into the orbit, but continued amaurotic, and the patient, liberated from great local suffering and severe headache, regained his health and strength, and continued well.

Encanthis.

In speaking of the subject of tumours, I may mention that the *caruncula lachrymalis* is described as being the seat of an enlargement, called encanthis; and two species of it are mentioned, the innocent and malignant. I never saw an enlarged caruncula requiring excision or any other surgical process, and therefore conclude the case must be very rare; and as to the malignant encanthis, I am equally unacquainted with it. If an inflamed or swelled state of the part were treated by the stimuli, which have often been so liberally applied to the eye, an affection, innocent in itself, might assume what are called malignant characters. The remedy for this kind of surgical malignity is obvious.

Granulated state of the Conjunctiva.

I have already mentioned that the granulated state of the conjunctiva occurs as one of the consequences of purulent ophthalmia; we often find the conjunctiva lining the lids, and that portion of it forming the angle of reflexion from the lids to the globe, preternaturally reddened and thickened in its whole texture, and its surface changed from its natural smooth polish, into an irregular granulated state.

This is most frequently observed as the result of purulent ophthalmia; but it is not necessarily so, it may take place after severe common inflammation. It is the result of violent inflammation of some kind, in which new matter is effused into the texture of the conjunctiva, which afterwards becomes organized, and the membrane being thus increased in bulk, has its surface thrown into irregular prominences, to which the name of granulations has been given. There are some varieties in the number and figure of these granulations; some are large and soft, and others small and hard; the older they are, the more firm, whilst at first they are so soft that a slight touch produces bleeding. These prominences are found more particularly on the conjunctiva lining the cartilages; and, as the tarsus of the upper is much deeper than that of the lower lid, the granulations are more numerous in the upper than in the lower lid. They are not confined, however, to the surface of the conjunctiva lining the tarsus, but extend more or less to the loose portion forming the angle of reflexion. Frequently the whole membrane is more red, with increased mucous discharge, and other symptoms proportioned to the degree of previous and existing inflammation. A very important effect produced by this state of the lids is vascularity and opacity of the cornea; the mechanical friction of these granulations on the surface of the cornea causes its vessels to be enlarged, so that the texture of the membrane is at the same time loosened and thickened, and hence haziness, a nebulous state, or more dense opacity of the cornea is produced. This opacity must be distinguished from that which is caused by inflammation of the corneal substance; in the present instance, the following is the order of events: 1st, acute inflammation, with interstitial deposition; 2ndly, formation of the granular surface, when the inflammation has subsided; 3rdly, opacity and vascularity of the cornea. Or the results of severe inflammation may be combined with these changes; viz. leucoma, synechia anterior, prolapsus iridis, partial staphyloma. Often too active inflammation of the membrane exists, with considerable puriform discharge; for the eye is weak and irritable, and very subject to relapse of inflammation, even on exposure to slight causes. The vascularity may proceed to the extent of covering the cornea with a complete network of red vessels, and the membrane may be so loosened and thickened as to exhibit the state technically called *pannus*, in which the boundary of the cornea can hardly be seen.

Treatment.—In the treatment of this affection, the first point is to inquire whether there is any existing inflammation. If the eye be at all actively inflamed, we must take blood locally, by cupping on the temple, or by leeches, employ aperient medicines and blisters, and regulate the diet. These means are to be repeated, and continued until the local excitement is removed. When this point is accomplished, a course of alterative and aperient medicines, combined with counter irritation, by issue or seton in the temple, will produce the best effects. The eye should be protected from external excitement, without constantly covering or shading it, and certainly without confining the patient to the house. If you can entirely arrest the inflammatory process, you will find, in many cases, that the conjunctiva will in a great measure recover its natural structure without any direct application to the membrane itself. If these measures are not in themselves sufficient, it will be necessary to have recourse to some means for destroying the granulated surfaces. It has been proposed to cut them off with scissors, or to shave them off with a sharp knife, having first everted the lid the more completely to expose them.

There was once a great controversy whether the knife or scissors should be used for this purpose, which has ended in the abandonment of both, and the substitution of milder treatment in place of this excision. After having employed the means for reducing inflammation locally and generally, we make use of astringent or escharotic remedies. You may apply to the granulated surface some astringent solution, as that of alum, or nitrate of silver, or the undiluted liquor plumbi subacetatis. If you use a solution of alum, or of the nitrate of silver, you should at first employ about two grains to the ounce of water, and gradually increase the strength of the solution to eight or ten grains; the solution should be filtered, and when that of lunar caustic is used in its stronger form, it should be applied to the granulated surface with a camel's hair pencil, having first everted the lid. In addition to this, the daily application of the citrine or red precipitate ointment to the lids, will be of great service; the Meibomian glands are generally affected, and you can seldom put a stop to the disease in the lids, until the natural office of these glands is restored, and, at all events, the application of the ointment is attended with benefit, as it prevents the lids from sticking together. The vinum opii is of no use in this affection, although it has been much recommended; people

have been so zealous in the praise of this application, that one would imagine it could cure every thing; but if a local remedy be of use to the granular lid, it must have an astringent or escharotic quality, neither of which the vinum opii is found to possess.

In using the stronger astringent, or escharotic applications, you evert the lid, so as to get the surface exposed, clear it from mucus or other moisture, and then employ whatever substance you may fix upon; still keeping the lid everted, till the action of the application is over, and then let the surface be carefully washed to remove any remains of the application. To prevent the injurious action of these strong remedies on the healthy conjunctiva oculi, and confine their influence to the diseased part, the exposed surface of the lid has been smeared with oil before restoring it to its natural position: this proceeding is not more efficacious than careful ablution with a soft sponge and simple water. The sulphate of copper may be used, either in strong solution or in substance; in the latter case, the whole of the granulated surface should be gently rubbed with it, until it assumes, after waiting a minute or two, a slight bluish tinge: the lid should be carefully washed and restored. This application should be repeated every four, five, or six days, as the eye will bear it.

The effect of all such applications will be to aggravate for the time the inflammation; you would no doubt expect to have some degree of increased redness and local irritation, in consequence of such an application. The nitrate of silver may be used in substance, as well as in solution, lightly touching the surface of the granulations with it in the latter case. The nitrate and muriatic acids, diluted with three parts of water, have been recommended; they may be applied immediately to the diseased surface by a camel-hair brush, as may also the strong solution of nitrate of silver. The potassa fusa has also been applied to the conjunctival surface of the lids. Such are the various escharotics which have been applied to the lids; and they should be used in conjunction with counter irritation and attention to the state of the stomach, bowels, and diet. Now I cannot speak favourably of the employment of escharotics in these cases; my experience is much more in favour of the antiphlogistic treatment, and the subsequent use of mild astringent applications to the eye, such as the solution of alum, and the undiluted liquor plumbi, paying attention at the same time to the diet, and to the state of the stomach and bowels; using the organ sparingly, and avoiding generally all external irritation. In the greatest number of cases these simple means, with issues in the temples, and the use of a little tepid water, or poppy fomentation, or the simple saturnine wash to allay the irritation, will accomplish all you can desire. You will often be surprised at the great and rapid improvement from the leaving off astringents and escharotics, and simply regulating the digestive organs, with the employment of nothing but the most soothing local means. In some cases, however, you may find it necessary to have recourse to mild astringent applications, as the solution of alum, or of the nitrate of silver, or the liquor plumbi, and if with these measures counter irritation be employed, you will find that they will succeed better than if used without them. Do not at any rate use the escharotics, until you have first tried the gentler measures, and even then very carefully. Recollect the great tendency that there is to relapse in the purulent ophthalmia, which causes this change of structure, and that you may bring on a return of active mischief. You must watch the case closely, and if this effect should be produced, lay aside the escharotics, and return immediately to the antiphlogistic treatment.

I have seen two or three instances of a very singular state of the conjunctiva, which I think right to mention to you, although I cannot offer any thing satisfactory as to its pathology or treatment. The conjunctiva loses its character of a mucous membrane, and no longer secretes; the eye becomes completely dry, and has a rough appearance; the cornea looks dry and dusky, the lids gradually adhere to the globe of the eye, and thus symblepharon is produced. I have seen it in young subjects, and could not obtain from them any clear account of its history, nor render any service by medical or surgical treatment; indeed, in the few instances under my own observation, the affection has been of long standing, and the alterations in the organ so considerable as to make all curative efforts hopeless.

The conjunctiva sometimes acquires a livid tint in persons who have long employed the nitrate of silver locally; and, as far as I know, that change of colour is permanent. The long-continued internal use of the same remedy, as in cases of epilepsy, produces a similar effect on the integuments generally, giving them a dirty appearance, with generally a blue or livid tint; and this change seems permanent.

Pterygium.

There is an affection of the conjunctiva called technically *pterygium*, from a Greek

word meaning a wing, the name being probably given from the triangular shape of the affected portion. It is a thickened state of the membrane, with some degree of increased redness, and marked enlargement of some of the vessels. It forms slowly, and is situated generally at the corner of the eye, the base of the triangle being toward the sclerotic coat, and the apex towards the cornea, generally advancing upon it. The thickening and vascularity of the membrane are greatest at the base, that is, on the sclerotica, where the conjunctiva is loose; it is thinner on the cornea, where the density of the membrane affords a greater resistance to the change: this difference explains the triangular wing-like figure which the disease always assumes, and constantly preserves, as the apex slowly makes its way towards the centre of the cornea. It appears more frequently in the internal than at the external angle, and seems to proceed sometimes from the caruncular lachrymalis, or the semilunar fold of the conjunctiva between it and the globe; at least the thick base of the pterygium is connected to these parts in some instances. It not uncommonly appears, at the same time, in both angles, and frequently in both eyes. Occasionally, but more rarely, it is seen at the middle of the upper or lower part of the globe, or in both situations at the same time.

It comes on quite insensibly, and grows very slowly; the patient experiences no uneasiness, and is not aware of its existence, till it has made some progress; we cannot, therefore, ascribe its origin to inflammation of the membrane, nor perhaps with strict propriety, class it among the consequences of inflammation. I have seen it most frequently in persons who have passed much time in hot climates, as in the East or West Indies. The pterygium is loosely connected to the sclerotica and cornea; you may elevate it from the globe, and it projects above the general surface of the conjunctiva, as if it were an adventitious growth. The texture of the membrane is not simply thickened; it assumes a fibrous aspect, which is often strongly marked, so as produce a tendinous appearance.

Pterygium presents itself under various forms, which have received different appellations. *Pterygium tenue*, or thin pterygium, is a slight and often very delicate fibrous and vascular layer, through which you can see the transparent cornea. You may have the growth more thick and compact, like a tough dense membrane, but still with more or less of fibrous character; it forms a thick and perfectly opaque layer on the cornea, becoming thinner on its sides and apex; this is the *pterygium crassum*, thick or fleshy pterygium. A malignant or cancerous pterygium has also been mentioned. I have never seen such an affection, and the appearances which have given rise to the description, have probably arisen merely from the injudicious use of stimulating and escharotic substances to ordinary pterygia.

A distinguishing character of this affection, is its slow progress; it will last many years without making much advance. However, it slowly proceeds towards the centre of the cornea, and it may thus ultimately interfere with vision, especially if there should be one on each side of the eye. I have seen many instances in which it has been apparently stationary for years; it has appeared at the middle period of life, and not grown so as to require any surgical treatment.

So long as it remains in the quiet state I have described, and neither interferes, nor seems likely to interfere with sight, you had better leave it alone. You may accelerate its growth by stimuli, but I believe you cannot retard it. If it should approach upon the cornea, so as to impede vision, or if it should threaten such an impediment, it is necessary to remove it. It is easy to cut off the morbid growth, either with a knife or scissors. Seize it with a pair of forceps, elevate it, pass a cataract knife, with its flat surface towards the globe, under it; then, carrying the knife horizontally forwards, shave the thickened membrane from the cornea, afterwards detach the basis, elevating the growth with the forceps, and cutting it away completely from its origin, either with the knife or scissors. The surface heals up, and you would not think of irritating it by any stimulating applications. This proceeding is applicable either to the thin, or to the fleshy pterygium. I mentioned before that I never saw a case of the malignant kind; but I think, that if common pterygia were treated in the mode which has been sometimes advised, they might not improbably put on the unfavourable characters, which have been ascribed to an originally dangerous nature of the affection.

You will find mention made of a *pterygium pingue*, which most commonly occurs in elderly persons. It consists of a few little yellow granules toward the angles of the eye, under the conjunctiva. It is not a disease, nor is it necessary to remove this little deposit of fat, unless the person should dislike the appearance. I never saw it proceed to a degree requiring an operation from any inconvenience to the patient.

Affections of the Cornea.

Perhaps I should have adverted more distinctly, when speaking of the diseases of the external parts of the eye, to inflammation of the cornea. I have mentioned how the cornea is involved in external ophthalmia; but it seems sometimes to be the original seat of inflammation, and some cases occur which might not improperly be arranged under the term *corneitis*. A piece of steel sticking into the cornea will produce inflammation, and will afford you a good example of a case of corneitis; it produces a degree of haziness, and a bright vivid red in the sclerotic coat; considerable pain in the eye and in the head. Of course you would treat such a case according to common rules. You may, however, have the circulation of the cornea so far disturbed, as to produce general haziness with redness of the sclerotic; and as the case goes on you will find a plexus of vessels lying between the conjunctiva and the sclerotic coat, with large trunks coming from the back part of the eye toward the cornea, and forming a zone around it.—There is considerable pain and intolerance of light, for you will recollect that the sclerotic coat is involved in the inflammation, and whenever that is the case there is always great intolerance of light. The progress of the inflammation is slow in this structure; the symptoms come on slowly; the vessels yield with great difficulty, so that the alterations produced as the consequences of inflammatory action take place slowly.

Treatment.—You will find it necessary to treat a case of this kind by pretty active antiphlogistic measures. You must guard against an error, which you find in books, that stimulants and astringents are useful to remove opaque states of the cornea, for if you were to use such means in these cases, you would aggravate the symptoms, and render the recovery very difficult. The antiphlogistic treatment is required; sometimes the abstraction of blood by cupping, especially in persons which are beyond the age of puberty, will be necessary, but in younger subjects leeches will suffice, conjoined with aperient medicines, counter irritation, and attention to the state of the stomach and bowels. It will be necessary to repeat and continue these measures for some time. If the affection should not be soon arrested, you must place an issue in the temples, and use mercury. I said that I had seen cases of this kind aggravated by injudicious treatment. I recollect the case of a young woman, about twenty years of age, who came to the Infirmary complaining of loss of sight in the right eye. There was considerable general opacity of the cornea, redness of the sclerotic coat, uneasiness on exposure to light, and increased lachrymal discharge. She said that she had been ill six weeks; that she had been under the care of a surgeon in her neighbourhood, and that by his direction she had been putting drops into her eye, which made the eye very sore and painful; however, as she was directed to do, she persevered in using them. When she showed me the prescription, I found that it was a solution of oxymuriate of mercury that she had been dropping into the eye. In this case it was necessary to cup her repeatedly, to apply leeches several times, to give a great deal of mercury, and to put an issue in the temple; and to persevere in these measures for a long time before the inflammatory action was removed. The cornea had not completely regained its transparency, nor was the sight fully restored until nearly the end of a year, during all which time she was using mercury more or less actively. In a few months she came again to the Infirmary, and said that she had the same complaint coming on in the left eye; she found the sight dim, and had considerable pain in the head; in short, the same symptoms which she had before complained of in the other eye. We had an opportunity of treating this eye from the first. We took blood from the temple by cupping, and employed the other treatment I have just particularised, and in six or eight weeks the complaint was completely put a stop to, although the cornea was generally nebulous when she came. The difference of treatment was very striking, and the results were equally so.

Inflammation of the cornea is a common affection in strumous ophthalmia; it is attended with the same kind of symptoms which I have already enumerated, marked perhaps by an increased degree of intolerance of light. When the changes of structure produced in the cornea exhibit themselves, they must be treated on the principles laid down for the management of strumous ophthalmia.

I have mentioned already that abscess occurs in consequence of violent inflammation of this texture; and inflammation commencing in the cornea itself is evidenced more by the deposition of new matter, or opacities, than by any violent degree of external redness. In cases of severe external inflammation the cornea will suppurate, but the matter which is deposited between the corneal lamellæ, although of yellow colour, is of thicker consistance than ordinary pus, so that if

you were to make a puncture it would not escape. Sometimes this deposition of yellow matter is confined to a speck, or part of the cornea, and at other times it extends over the whole surface. When this is the case ulceration follows, and thus the newly-deposited substance is removed.

You will read in books, that the matter which is poured out under inflammation finds its way to the bottom of the cornea, insinuating itself between the laminæ, and accumulating at the lower edge, produces there an appearance which has been called *onyx*, or *unguis*, from its resemblance to the white mark seen at the root of the nails. I believe, however, that the cornea is too dense to admit of this mechanical subsiding of the matter; I cannot say that I ever saw onyx in this sense, and I believe that when the matter is deposited in any part of the cornea, there it remains. If the term onyx be applicable to any condition of the eye, it is that in which the matter is effused into the anterior chamber, when its appearance admits of comparison to the mark in the nail. The matter of abscess in the cornea will either make its way out by ulceration, or will become absorbed. The nebulous opacity surrounding the matter, to a considerable extent, is entirely removed as the inflammation subsides, and the spot where the matter was situated only remains opaque. This spot has a yellowish appearance, and never completely recovers its transparency.

Vascular Cornea.

The cornea is liable to a change of structure from enlargement of its vessels, which become capable of admitting red blood. Now although it is perfectly transparent in its natural state, and although we can trace no vessels passing into it, yet there can be no doubt that it has vessels the same as any other part of the body; for, without such an arrangement, how could we have the various phenomena, both healthy and morbid, which we see exhibited? But, when the cornea becomes the seat of inflammation, its vessels are so much enlarged as to present a considerable appearance of vascular congestion, and the same appearance is observable in common external inflammation, whether acute or chronic. Of the effect of mechanical irritation in producing this vascular state of the cornea I have before spoken, when noticing the granular state of the lids; and where this vascularity, gradually produced, has gone to its utmost extent, it is called *pannus*, from the part appearing as if covered with a red cloth.

Treatment.—In the treatment of the vascular cornea, the first thing is to remove the inflammation and the causes of the irritation. When vascularity of the cornea is the immediate result of inflammation—when it arises as the immediate effect of the inflammatory impulse distending its vessels, then the depleting system puts a stop to the inflammatory action, and the vascularity disappears. If it should be produced by the mechanical irritation of the granular lids or inverted cilia, these must be removed. If it appears to be the result of a chronic inflammation, especially strumous inflammation, the point to which the attention must be directed must be to put a stop to it. The question is, whether we can do any more—whether we can derive any advantage from the division of the trunks of the vessels by the knife or scissors; whether we can derive any benefit from cutting through the trunks of the vessels as they pass on the margin of the cornea? This division of the vessels has been recommended, and that strongly, but I have never seen such division of any benefit; the vascularity of the cornea is the result of inflammation or mechanical irritation, and if you remove these the effect will cease.

Ulcers of the Cornea.

The cornea is prone to ulceration, and I have spoken to you of ulcers of the cornea as a concomitant of the various inflammations, whether common, strumous or purulent. The cornea is analogous in some points of its structure, and with respect to this circumstance of ulceration, to the articular ends of bones; in these you have an elastic dense substance, the cartilage, and that covered over by a membrane very similar to mucous membrane, the reflexion of the synovial membrane. You have the articular ends of the bones very liable to ulceration, and the ulceration that occurs is attended with this peculiarity, that there is no formation of pus; it is a simple process of absorption, a gradual removal of the substance of the part as if worm-eaten. The natural texture of the cornea is analogous to this; you have the cartilaginous laminæ and the conjunctiva covering them. The cornea is very liable to ulceration; the ulcers exhibit no granulations, and produce no pus. Ulceration of the cornea may be superficial, or it may extend into the laminæ, and produce deep excavations, or it may

go through the whole, penetrating the anterior chamber, and causing prolapsus of the iris. There is a kind of ulcer which I have already mentioned to you as occurring in purulent ophthalmia, extending deep into the substance of the cornea, and sometimes spreading nearly along its whole circumference; it is a very formidable kind of ulcer. An ulcer of the cornea, if attended with inflammation, and in a spreading state, will present a whitish, or yellowish surface; it is generally regular in figure, round or oval, but it may be quite irregular, and have ragged edges. When inflammation is not present, and the ulcer still spreads, it has a transparent surface, so that it may easily escape observation; a slight opaque halo sometimes surrounds the margin of the ulcer, to a greater or less extent. When ulceration ceases, and the restorative process commences, the dusky whitish or yellowish appearance is exchanged for a pale grey or bluish tint; the materials of reparation are deposited under similar appearances in the transparent ulcer. The soft greyish matter fills up the excavations; the edges of the ulcer become rounded off and smooth; when it has been filled up with this substance, it appears to be glazed over by the formation of a conjunctival covering, and thus the smooth surface of the cornea is restored. During this healing process, a red vessel or fasciculus of vessels is observed proceeding to the ulcer, often through a considerable portion of the sound and transparent cornea. These, instead of requiring division, are the essential agents of restoration: they shrink and disappear when the purpose is answered. The same degree of contraction takes place after the healing of an ulcer in this situation, as in other parts of the body. Hence, although the ulcer should be so large as to cover the pupil, or a considerable portion of it, the cicatrix will ultimately be much less considerable, and thus patients often see well when we have feared that the opacity left by the ulcer would destroy all useful vision.

The effect of the cicatrix upon vision will of course depend upon its situation; since, although it will contract, it remains permanently opaque. The opacity consequent on ulceration is marked by a shining whiteness, and is seldom so dense as to prevent entirely the passage of light; while in some cases it is so thin a film, as hardly to injure vision. The circumference of the cicatrix exhibits a nebulous halo, which is gradually dispersed; and thus the extent of the opacity is much diminished.

Treatment.—What treatment is to be adopted in ulcers of the cornea? The truth is that when these appearances attend inflammation, the treatment must be directed to the mitigation of that inflammation, just the same as if the ulcers did not exist. When you have succeeded in arresting the inflammatory process, the ulcers will do well of themselves. The ulcer is the consequence of inflammation, but some representations would almost induce one to suppose that the inflammation was the result of irritation caused by the ulcer. It is not necessary to adopt any local treatment merely in reference to the ulcer. Do not on any account think of dividing the vessels leading to the ulcer. I do not see how lunar caustic, which has been so much recommended, is to act upon the diseased eye beneficially, unless we suppose that it will have different effects from what it produces in other parts. I have so little opinion of any good being done by caustic or astringent applications to ulcers, that in twelve months I do not order them six times. Even supposing the inflammation which generally attends the ulceration of the cornea to be removed, I do not see how a solution o lunar caustic can contribute to the healing of the ulcer; and in the early stages of the complaint instead of accelerating the healing process it must prove decidedly injurious. I have seen great benefit in some very obstinate cases, from an issue being made in the temples.

[Mr. Lawrence here mentioned a case in illustration of this point.]

Sometimes ulceration will proceed through the component layers of the cornea, until it comes to the membrane secreting the aqueous humour, and then go no farther; in such a case, you will have a little transparent vesicle appearing in the bottom of the ulcer, protruding when the muscles of the globe are put in action and retiring when that action ceases. Such an appearance has been called ceratocele, or hernia of the cornea. If the ulcer fills up, this vesicle is soon lost sight of; when the ulcerative process extends, the anterior chamber is penetrated and prolapsus iridis occurs.

LECTURES

ON THE

THEORY AND PRACTICE OF PHYSIC,

BY DR. CLUTTERBUCK.

Theatre, General Dispensary, Aldersgate-street.

LECTURE XXX.

Gentlemen,

HAVING now concluded the subject of diseases of the alimentary canal, I am in the next place, to speak of those of the organs subsidiary to digestion; viz. the *liver*, *spleen*, and *pancreas*; and first of

Diseases of the Liver.

I cannot help remarking to you, Gentlemen, at the outset, that a great deal of quackery, both regular and irregular, exists upon the subject of *liver diseases*, the *secretion of bile*, &c. and which I shall advert to as we proceed. When we reflect, however, upon the great bulk of the liver, and the large quantity of blood with which it is supplied, it is impossible not to conclude that it is destined to some important office in the animal economy. Its immediate function is that of forming *bile*, a peculiar fluid that is discharged into the beginning of the intestinal canal, so as to mix with the food as it passes from the stomach; but what change precisely the bile effects upon this, we are altogether ignorant of. It may be naturally inferred, however, that it answers an important purpose in the process of chylification; and we find, accordingly, that when the bile is obstructed in its passage into the duodenum, dyspepsia or imperfect digestion is the consequence, and the general health suffers.

There is a peculiarity in the circulation of the liver, which is deserving of your attention. This organ, in addition to its proper nutrient vessels, the hepatic artery and its corresponding veins, has, ramifying within it, a large vein called the *vena portæ*, and which is formed by the union of most of the veins of the abdominal viscera. Now this vein, the *vena portæ*, appears to exercise the functions of an artery; that is, after minutely ramifying through the liver, it forms or secretes the bile, which is afterwards conveyed through its proper channels, the biliary ducts, into the duodenum. When there is no food passing from the stomach into the intestine, so as to require an admixture of bile, this fluid instead of entering the intestine, appears to regurgitate through the cystic duct into the gall-bladder, where it probably remains till it is wanted for the purposes of digestion. During its stay here, it acquires greater consistency, by the absorption of its thinner parts; but whether it undergoes any further change seems undetermined.

The morbid states to which the liver, and its appendages, the gall-bladder and biliary ducts, are liable, are the following: 1. Inflammation of the liver, both acute and chronic, termed *hepatitis*. 2ndly, Obstruction of the passage of the bile into the duodenum, and the subsequent absorption of it into the general vascular system; whence it is deposited on the different surfaces, so as to tinge them of a yellow colour; thus giving rise to *jaundice*; and 3dly, Concretion of bile during its lodgment in the gall-bladder, (and probably in the ducts also,) forming thus what are called *biliary calculi*, or, when of considerable hardness and somewhat regular conformation, *gall-stones*.

A great deal is said and written at present about *torpid livers*, and *vitiated bile*; but there is no sufficient reason, at least that I am acquainted with, to admit these as *primary* affections; how far they incidentally take place, will appear as we proceed.

Of Hepatitis.

Definition.—The only characters that can properly enter into the definition of this disease, (that is, which are almost constantly present in greater or less degree,) are the following: "Pain upon pressure; imperfection or disorder of the digestive function; with more or less of sallowness of the skin." You will find many other symptoms enumerated by authors, and which undoubtedly sometimes appear; but as the disease may exist without them, they cannot properly be made a part of the definition. They necessarily, however, enter into the general history of the disease, and must, therefore, be attended to

History.—Among the occasional symptoms of *hepatitis* are, *pain* and *tension* in the right hypochondrium, with difficulty of lying on the left side. Now as the liver extends across the body, into the left hypochondrium; and as any part of it may be inflamed, the pain, consequently, may be felt in the centre of the body, or in the left side, and not at all in the right. Or the disease may occupy the posterior part of the liver, and then the pain will be re-

ferred to the back. If the left side only be affected by the inflammation, the patient will lie easier on that side, than on the right.

Pain at the top of the right shoulder and clavicle, though often present, is far from being constantly so. Cough and difficulty of breathing still seldomer occur. *Vomiting*, or at least *nausea*, is more frequent, and indeed to be expected, considering the connexion of the liver with the digestive function. *Hiccup* is not an uncommon symptom of *hepatitis*. *Pyrexia*, or a febrile state of body, though not a necessary attendant of this, more than of other inflammations, is yet very generally present, and that in a degree corresponding for the most part with the violence of the disease: of such febrile state of body, the least equivocal proof is afforded by the tongue, which is more or less incrusted, and generally of a yellowish hue. The pulse is less to be relied upon in this case; for where the substance of the liver is the part chiefly suffering, the pulse will often be little, if at all, disturbed. If the investing membrane be the part inflamed, the pain is often as acute as in pleurisy, and the pulse similarly affected, while the seat of pain is nearly the same in both. This makes it difficult at times to distinguish *hepatitis* from *pleuritis*, especially when it is attended with cough or dyspnœa. The distinction can then only be satisfactorily made by attention to the state of functions. If the liver is the part inflamed, the altered state of the biliary discharge, as discoverable in the appearance of the fæces, and the disorder of the digestive function, will often enable us to decide. Should *jaundice* occur, which is now and then the case, it serves to remove our doubts with regard to the real seat of the disease. Happily a mistake in our diagnosis here is of little moment, as the treatment is in most respects the same.

Varieties.—*Hepatitis* has been divided by authors into the *acute* and *chronic*, as if they were two different *species* of disease: they are, however, only different degrees of the same affection, and there are all possible gradations between the two extremes. The more *acute* cases are marked by a greater degree of febrile action, and sometimes by more severe pain; but, as I before observed, if the inflammation is confined to the substance of the organ, without affecting its peritoneal covering, it may be attended with but little pain. If the inflammation is both violent, and extends throughout the organ, the function may be altogether interrupted, so that no bile will be formed. This will be known by the absence of bile in the alvine discharges, which will be white or clay coloured; while, at the same time, there will be no yellowness of the skin. Very slight inflammation of the liver may have the opposite effect, of producing a more abundant secretion of bile, which, not being interrupted in its passage into the intestines, may irritate them, so as to become a cause of diarrhœa. The stools then will be highly *bilious* in appearance, or variously coloured; and to this state of things the term *hepatirrhœa* might be properly enough applied.

If the inflammation, without being so violent and extensive as to put a stop to the secretion of bile altogether, is so situated as, by pressing upon the biliary ducts, or involving these in the disease, to interrupt the free passage of the bile into the intestine, absorption may follow, and *jaundice be produced*.

Hepatitis, in its milder or *chronic* form, may be generally known by some degree of uneasiness felt in the region of the liver, and which is increased upon pressure: by some disorder in the state of the secretion; and especially by sallowness of the complexion, and high-coloured urine; by disordered digestion, and by a furred and yellowish state of tongue. Sometimes the liver can be felt in an indurated, if not an enlarged state.

Progress and Terminations.—The progress of *hepatitis* is often slower than that of many other inflammations, on account of the small share of irritability possessed by this organ. The terminations are as various as in other inflammations. It may terminate in health, and that spontaneously; or it may kill by the mere violence of the inflammation; or it may end in suppuration, the abscess bursting either into the adjoining portion of intestine (a previous adhesion between them taking place), which is the most frequent case; or the abscess may make its way to the skin, remote as this is; or it may even penetrate the diaphragm, and subsequently the lungs themselves, so as for the matter to be brought up by coughing; and this also may end favourably, of which I have seen several instances. It is exceedingly uncommon for the abscess to burst into the general cavity of the abdomen, though this is a possible case. Another termination has been mentioned, namely, *scirrhus*. This, however, is merely a continuation of the disease, with change of structure.

Hepatitis is one of the remote causes of *dropsy*, especially of the abdomen (*ascites*); which it appears to produce by the interruption given to the return of blood by the veins.

Prognosis.—This, upon the whole, is favourable; for a proper and sufficiently early application of remedies, generally proves successful.

Causes.—The causes of *hepatitis* are the ordinary ones of inflammation; namely, exposure to cold, and direct injuries inflicted on the organ. The presence of gall-stones in the biliary ducts, is likewise an occasional cause; as is excessive stimulation of the stomach by strong drinks and spicy food: this last cause is commonly productive of a *chronic* form of the disease. *Fever* often appears to give rise to *hepatitis*, especially in hot climates; and when the fever is accompanied with jaundice, the disease is called the *yellow fever*. *Intermittents* also give rise to what is called diseased or obstructed liver, by which you are to understand, *hepatitis* in a chronic form.

Hot climates strongly predispose to inflammations of the liver, and that in all degrees. In cold climates, *hepatitis* sometimes prevails *epidemically*; as during the prevalence of east and north-east winds. In this case, the disease is generally acute in its form, and often as painful as inflammation of the pleura.

Treatment.—The treatment of *hepatitis* is so similar to that of other inflammations, as to require but a short notice. As in other cases, the treatment must be governed by different circumstances; as the violence of the disease, its stages, the age and strength of the patient; and so on. *Bloodletting*, *purging*, and sometimes *vomiting*, and *counter-irritation* by blisters or otherwise, are the principal means to be relied upon. Even in the more *chronic* cases, *bloodletting* may be requisite, though to a small extent only. When there is no further occasion for *bleeding*, *mercury* may be sometimes usefully employed, so as slightly to affect the mouth. But you are not to consider *mercury* in the light of a *specific*, as is often done, but only as acting upon common principles, as in other inflammations. It is by no means proper but rather injurious, in the most active state of inflammation, and while *bloodletting* is required.

If there is any peculiarity in the treatment of *hepatitis*, it is in the greater necessity there is for the use of *purgatives*, which produce a better effect here than in many other inflammations. In the *chronic* forms of the disease, a long perseverance in a proper course of treatment is required; and to this, the milder purgatives only are adapted. This gives a great advantage to the saline springs of Cheltenham and similar places; as, from the mildness of their operation, they can be borne for almost any length of time, not only without injury, but with benefit to the general health.

I hardly need observe to you, gentlemen, that where these diseases arise from excess in food or drinks, it is indispensible to avoid this; without which, no means are likely to prove successful. When the disease arises in a hot climate, as in the East or West Indies, an early removal to a temperate climate is often found indispensible to the cure.

Of the Jaundice.

Definition.—"Yellowness of the eyes and skin: urine of a dark red colour, tinging substances immersed in it of a yellow hue: the fæces whitish or clay coloured."

History.—This affection has been called *icterus;* and likewise *aurigo*, in allusion to the golden hue of the skin. Jaundice is not so properly to be considered a disease in itself, as a consequence of disease, and that of different kinds; as you will presently understand. The colour of the skin varies considerably, from the palest yellow to an almost livid hue, to which the term *black jaundice* has been vulgarly applied. Sometimes the colour is greenish, and Dr. Baillie called it the *green jaundice*. These distinctions are of no moment, as they are only different degrees of the same thing.

Jaundice is commonly attended with some or other of the following symptoms. A disrelish for food, and often nausea or even vomiting; uneasiness of stomach after eating, with the ordinary signs of indigestion following. Generally, but not always, costiveness. Pain, often very acute, at the pit of the stomach, extending to the back, and sometimes girding the body, as it were, and which is relieved by pressure. In this case the pulse is slow, with a general feeling of coldness. At other times, the pain at the stomach is aggravated on pressure, when the pulse is generally frequent, and commonly at the same time weak, with other febrile symptoms. There is a feeling of lowness or depression of strength and spirits. Often, likewise, there is a troublesome itching of the skin.

Causes.—The remote causes of jaundice are not always obvious. It may arise from *cold*, or as a consequence of indigestion, or from certain poisons: also from emotions of mind. It sometimes appears during pregnancy, and occasionally in new-born infants.

Theory.—It is necessary you should attend to this, because the treatment is in a great measure governed by it. In jaundice, the bile is secreted as usual, but it does not pass readily into the duodenum, from some cause impeding its transit through the biliary ducts. The consequence of this obstruction is, that the bile is taken up by the absorbents and carried into the general mass of blood, from which it is deposited on the different surfaces by the exhalants, and in part carried off by the kidneys and other secretory organs, so as to betray its presence by the yellow colour. Little or no bile passing into the intestines, accounts for the pale or clay-like appearance of the stools; though sometimes enough bile passes to tinge them of the natural hue.

Now the bile may be obstructed in its passage through the biliary ducts by different causes, which it is necessary you should be acquainted with, as each requires a different treatment in some points. These causes, I shall now proceed to lay before you.

1. The first I shall mention is *inflammation* of the liver, or of the ducts themselves, or of the duodenum where the ducts open. If the liver should be inflamed in the neighbourhood of the ducts, whether in an acute or chronic degree, the swelling that attends the inflammation may press upon these, so as to interrupt the passage of bile through them; and it is obvious that the same consequence would result from either the ducts themselves, or the duodenum, becoming inflamed, and of course thickened and contracted. It is plain also, that inflammation and swelling of any neighbouring part, might produce the same effect. Now this, viz. inflammation, is a very frequent cause of jaundice, and may be discovered by the usual signs, namely, pain at the pit of the stomach, and tenderness upon pressure, together with a furred tongue, and other febrile symptoms.

2. *Simple pressure* taking place upon the biliary ducts, by the enlargement of other viscera, or the formation of preternatural tumours in the abdomen. In this way, the occurrence of jaundice during pregnancy may be explained.

3. A third cause of obstruction is *spasmodic contraction*, either of the ducts themselves, or of the duodenum, which would produce the same effect. This appears to be the immediate cause of jaundice, when produced by terror or other violent emotion of mind. The disease in this case takes place very quickly, and is likely to be attended with severe pain in the region of the ducts; which, however, in general soon ceases, if no other cause is present.

4. *Concretion of the bile* in different degrees, is one of the most frequent causes of obstruction to the passage of the bile, so as to give rise to jaundice. This is the affection termed *gall-stones*, which I shall have occasion to again advert to. I may observe at present, that this cause is known, or rather suspected, by the frequent returns of pain in the region of the stomach, often with vomiting, and without the usual characters of inflammation, at least in the beginning. It is worth while, in these cases, to examine attentively the alvine discharges, as it will often be found that biliary concretions, of different sizes, and sometimes in great numbers, are passing from time to time. It has been supposed (but I know not on what foundation) that the occurrence of jaundice in new-born infants is owing to too viscid a state of the bile, impeding its passing into the intestines.

Duration and prognosis of jaundice. These depend upon the immediate cause of the obstruction, and the chance there may be of effecting its removal. Thus, when jaundice is owing to recent inflammation of the liver, it is in general easily removed; but in chronic hepatic affections, (i. e. chronic inflammation,) the removal of this, and consequently the disappearance of the jaundice, is less probable. 2. When jaundice arises from the second head of causes, the *prognosis* is unfavourable; with the exception, however, of the cases that depend upon pregnancy. 3. *Spasmodic contraction*, the result of mental emotion, being a temporary state, jaundice arising from this cause, may be expected soon to disappear. 4. The *prognosis* in cases proceeding from *gall-stones*, is extremely uncertain. Even if the jaundice disappears, it will probably recur from time to time, as fresh formations take place, the disposition to which is very likely to continue.

Treatment.—The treatment of jaundice consists, or ought to consist chiefly in endeavouring to remove the existing cause, whatever this may be; for we have no means of removing the bile from the general mass of blood, nor from the part in which it is deposited. By degrees, however, it is thrown off along with the different secretions and excretions, so that it requires no art for its removal.

When *inflammation*, acting in the manner I have stated, is the obstructing cause, antiphlogistic measures are necessary, and amongst the rest bloodletting, in a degree proportioned to the activity of the inflammation, and the general strength of the patient. In most recent cases of jaundice, you will find it useful to bleed the patient to a greater or less extent; and very generally so where there is pain at the pit of the stomach, (though it be only discoverable by pressure;) and where at the same time the tongue is dry and furred. The pulse is not to be relied upon in this case, as it is often slower and weaker than in health. In all cases it will be proper to result to the frequent use of mild cathartics, and an abstemious mode of living. When visceral disease, or preternatural formations, are the cause of interruption to the passage of the bile, we have scarcely any other means of relief than those I have just mentioned. *Mercury*, in some form, is indeed much used and relied upon; but it will seldom produce the desired effect, either in these affections, or in chronic inflammation of the liver itself; while it often proves injurious to the general health. In chronic hepatic affections, you will find it more useful, according to my experience, to persevere in a moderate antiphlogistic plan of cure, employing especially the milder purgatives, such as the saline springs of Cheltenham, Leamington, and various others, that are scattered throughout the country, than to trust to the use of mercury in any form; which, if it be sometimes useful, is often quite the reverse.

In jaundice arising from *mental emotion* exciting spasm of the ducts or duodenum, little is required to be done; as the spasm will commonly have ceased before remedies can be applied. But if we are led to suppose, from the existence of pain, unaccompanied by the marks of inflammation, that spasm still subsists, it may in general be easily taken off by what are termed *antispasmodics*, as stimulants of various kinds; or by opium. But either an emetic or a purgative would be likely to answer the purpose in a better manner, and with less inconvenience afterwards.

REVIEW.

Novum Organum Medicorum.—A new Medical Logic, or the art of Thinking and right Reasoning applied to practica Medicine, exhibiting the principles advanced in a larger work, under the same title.—By VICENZO LANZA, M.D., Professor of Clinical Medicine in the *Ospidale della pace*, at Naples. Translated from the Italian, by C. STORMONT, M.D.—8vo. pp. 284. London, 1826, S. Highley.

ACCORDING to the translator, Lanza's system "cannot be classed with any of the theories which have hitherto been suggested, whether the mechanical or chemical, the humoral pathology, the doctrine of spasm, or the far famed Brunonian system of debility and excitement. In all these, certain general principles are assumed, from which their advocates profess to explain the phenomena and essential characters of diseases, and to found their respective practical dogmas; while Lanza is guided in every step by logical induction, and admits no general principle but what results from the minute and analytic consideration of particular facts, at once undisputed and unquestionable." In short, while other systems are constructed by *synthesis*, Lanza's proceeds by the more tedious, but surer method of *analysis*. According to this author all the *facts* of practical medicine may be comprehended under five heads; "Hence," says he, "experience affords to the physician five grounds only for his reasoning, and these are the following:

1st, The exact investigation of the external causes which have produced the disease; 2dly, the complete description of the phenomena of the disease itself, not less than of the idiosyncracy of the patient; 3dly, the impartial observation of the things usually recognized as agree-

able or hurtful to the patient, especially of those of the non naturals; 4thly, the result, happily or otherwise, of the cure; and *lastly*, the analogy rightly instituted between the various species of the disease itself, and between diseases similar or opposed to each other."

To meet these facts, he employs two species of induction—the one clinical or practical; the other theoretical. "Clinical induction is simply common reasoning applied to the said facts, in order only to measure the relation between, and to draw the consequence flowing from, their union." Hypothetical induction is founded upon the notions we have formed of life, of health and disease, and applied to some particular malady, in order to understand its nature and the operations of remedies. When the facts, accompanied by simple clinical induction, are not sufficient to enable us to give an opinion, we are obliged to resort to hypothesis. "For this reason," says the author, "medicine must always be an hypothetical or fallacious art, until the time shall arrive, if indeed it will ever come, in which the idea, in what life, health and disease consists, shall be real and no more hypothetical; but in the present day, although every contrivance is used in order that hypothesis may be the least possibly employed, we can never arrive at absolute certainty in any question in medicine; and we are accustomed to believe, and to announce to others for certain, that which is only in the greatest degree probable."

That hypothesis may not lead to errors of practice, our author recommends a careful consideration of the following maxims:

1. Every judgment which bears evidence proceeding from experience, accompanied with *practical induction*, with little or nothing hypothetical, may be held as highly probable, whence to pronounce less dubiously the prognostics, and to undertake with more energy the cure.

2. All other judgments, which are the most numerous, that bear evidence of being derived from obscure facts, attended with weak clinical induction, and for that reason sustained, in a great measure, by hypothetical reasoning, should be held as little probable; whence the prognostics are to be pronounced very dubiously, and we are to withhold ourselves from all violent and dangerous methods of cure."

A good physician founds his practice on reason and experience; where this fails, he calls analogy to his aid, and where that is deficient he will not adventure too much in the dark. So constituted, it is probable he will seldom mistake his course. His conclusions are drawn from facts, from what he has been able to discover of nature's operations; his induction is practical, (which in the language of Newton "though no demonstration is the best way of arguing which the nature of things admits of; and may be looked upon as so much the stronger by how much the induction is the more general,") and opposed to hypothesis, which never made a good, or what our author terms, a "clinical" physician. Brown and Darwin are already forgotten, Sydenham and Jenner were of the proper class, and their laurels will never fade.

We shall endeavour to give an outline of the author's theory, or his division of all diseases into two classes—of mode and of degree. Premising that the term *vital force* is used to express "the abstract idea of that which exists within the living machine, and there, by its physical operation, makes it be such as it is while it lives," he proceeds to argue, that as long as this force operates rightly there will be health, or "that kind of life in which people delight to find themselves;" but if the vital force be excessive, or if it operate "in a mode that it ought not," disease follows; to wit, "that state of life in which the living being does not delight to be." Thus then all diseases are, hypothetically, divided into two great classes, that is, "into those of

grade, consisting in a simple change of degree, and into those of *mode*, consisting in a change of manner, not less than of degree, in the vital force."

Again, diseases of grade are either hypersthenic, hyposthenic, or irritative. In the Italian schools of the present day, the first are called diseases of *stimulus*, the excitement being more than ordinary, such as ebriety, exhaustion from fatigue, &c.; the second, diseases of *contra-stimulus*, the excitement being less than ordinary, (fasting, molestation from cold, &c.); and lastly, diseases are called irritative, "from presenting, not so much a greater or less degree in the excitement, as perturbation in the same, and are produced by exciting causes not akin, nor assimilable to life, and which do not cease to disorder, confound, and subvert every process of life," as long as they are suffered to remain; a thorn which wounds the nervous filaments, a caustic which consumes the skin, a tooth in the act of cleaving the gum, and many others, are examples of this.

Diseases of grade are "simply variations from, or disturbances of health,"—slight and evanescent affections. Diseases of mode, on the contrary, impose new qualities on life, they—

"Arise, run their course, and terminate according to laws in all respects peculiar to their nature; and, it is observed, that whether excitants or debilitants be used, they do not lose their morbid qualities unless by health or by death. Angina, pleurisy, rickets, scrofula, the gout, small-pox, petechiæ, scirrhus, must be considered of morbid qualities, because each of these diseases, however found akin to another, yet it is always of such quality that it can never be confounded with any other."

According to Dr. Lanza, all diseases of mode are hypersthenic (scrofula? petechiæ?) and "when an hyposthenic disease of grade, as fever, changes into a disease of mode (e. g. hepatitis,) it immediately becomes hypersthenic. If drunkenness become phrenitis, it loses that grade which it had at first, (hyposthenia,) and takes that new one which has respect to the new morbid qualities (hypersthenia)," which is merely making a disease of what has generally been termed the remote cause.

For practical purposes, he divides diseases of mode into "*diathestic* and *adiathestic*;" the former signifying those which leave the body more disposed, and the latter those which leave it less disposed than they found it. Angina tonsillaris is an example of the one, and small pox of the other. Hyposthenia and hypersthenia, being opposite qualities, cannot exist together; but either may be complicated with irritation, diathestic modality, and adiathestic modality, or some of them. According to the author, "a petechial fever with worms" may be complicated with an endemic intermittent; and a person so afflicted "may find himself very weak and emaciated from the duration of the malady."

"It is easy to observe," he continues, "in such an one, a physiological debility, or hyposthenia, in the state of his body, a quantity of irritative symptoms proper to vermination, the phenomena of the morbid, petechial, adiathestic modality, and those of the diathestic modality proper to the periodic endemic. These diseases are usually called complicated; and under this aspect, almost all diseases either are or may be complicated."

We do not object to the worms, but cannot admit the petechial fever as distinct from the ague, that it can be called an adiathestic disease; or, in the words of the author, that any thing of the "adiathestic modality" appertains to it. The diathestic modality may be in full force as to one disease, and the adiathestic to another, but it is obvious that the latter only holds good of the small pox, and a few other special favorites.

Theory of Remedies.—The author resolves remedies into four classes, according to their *modus operandi*, viz., specifics, vivicants, solvents, and irritants. *Solvents* (for we need not notice the first and second classes) are "those agents which impoverish life, which diminish the vividness of its phenomena and enfeeble its force." In the hyposthemic diseases of grade only (*contra-stimulus*) are vivicants of service. In all other diseases, except a few which may be cured by palliative or prophylactic means, solvents are to be employed.*

Irritants.—In order to understand Dr. Lanza's ideas on the *modus operandi* of irritants, it is necessary to premise that, according to his hypothesis, all agents may operate "either ordinately or disordinately."

"The vital force, as every other natural force, has a *capacity* in receiving the influence of external things; hence there is a point to the extent of which an agent, operating, succeeds regularly as a vivicant or as a solvent; but given in a dose which exceeds the limits of the natural capacity, it disturbs, irritates, and disorders life; so that instead of being of benefit, it comes to produce a new disease of irritation; the which again, whatever may have been the nature of the agent, whether solvent or vivicant, may become either inflammation or congestion, or nervous, or of whatever other morbid form."

The principal point in which the author's theory differs from Brown, and from the doctrines commonly taught in the Italian schools, consists in his admitting modality on the particular qualities of diseases and their remedies. According to Brown's hypothesis, all diseases are either sthenic or asthenic—of grade and passing into each other; while Lanza asserts that "the vital force" is altered in *quality* as well as in degree; for says he, "a machine, which is supposed capable of changing the *mode* not less than the degree of life, when it has morbidly suffered some modal change, necessarily comes to sustain, when the morbid process is established, a new life, a new mode of being, and to manifest its peculiar phenomena, and even a new texture." But it is difficult to understand how, if there be "a new life, a new mode of being," patients should get well of themselves, or that life of the original quality, so to speak, that is the healthy state, should have so constant a tendency to recur; besides, the mind cannot form a very clear idea of different qualities of life, except in degree, which will not meet the hypothesis. The author asks, "Is it not equally impossible to understand the change of *degree* of any force?" To which we answer, no; and if it were, *a fortiori*, it only adds to the confusion which must always attend researches into the nature, much more the *qualities* of life. Dr. Lanza's theory, though ingenious, is nothing more than Foderè's doctrine of "disordered vitality," or Hunter's phrase of parts, "taking on diseased action," generalized; and as these have no definite meaning, so that is too subtle for our comprehension.

The treatment is either radical, palliative, or prophylactic. The first method is divided into specific or modal, and "minorative or gradual." The *specific* cure is the cutting short a disease by some agent, "which changes the morbid mode to health;" the *minorative*, that

* The author employs the word "*sciogienti*" to signify those remedies which reduce the strength, or which tend, in conformity with the meaning of the Latin verb *solvo*, to solve, loosen or untie, the hold which a disease has of the body; or, in short, to promote the resolution of a disease; while the usage of the English language confers a very different meaning upon the kindred word solvents. Among the "*sciogienti*," are included blisters, electricity, magnetism, as well as many of the narcotics, as cicuta, hyosciamus, digitalis, lauro-cerasus, belladonna, &c. "deobstruents or resolvents."—Translator's preface.

which exists the disease, and which consists in administering stimulants, if the excitement be diminished, and *vice versa*; finally, whatever averts the return of a paroxysm of disease, or tends to preserve health, is prophylactic. Is bark febrifuge (specific) or antiperiodical (prophylactic) in the cure of intermittents? a subject, with many others, discussed in the subsequent chapters. These are entitled to an attentive perusal, since much is done towards freeing physic from the trammels of the empirics, and founding it on reason and experience, the true *method* of the Hippocratic school.

An Exposition of the State of the Medical Profession in the British Dominions: and of the injurious effects of the Monopoly by Usurpation of the Royal College of Physicians in London. 8vo. pp. 373, Longman, Rees, and Co. 1826.

To expose the abuses which exist in the medical profession, and to suggest remedies for those abuses, have occupied no small share of our attention; and if in the course of our labours we have but slightly glanced at the College of Physicians, it has arisen from no partiality to that body, nor an idea that it was spotless and needed no purification. The College of Surgeons has demanded our closest attention; its evils were the most crying, its despotic influence the most severely felt. The College of Physicians has at its head a man of undoubted talent in his profession, and of the highest respectability out of it; and in the maintenance of its own rights, has of late years shown no desire to encroach on the rights of those who are subjected to its power; it has ceased to be mischievous, and is at present almost harmless. The College of Surgeons, on the contrary, has at its head men, some of whom, in their professional capacities, are the object of universal contempt, and all of whom have shewn themselves incompetent to manage the affairs of the body over which they preside — men who, by acts the most oppressive and partial which self-interest could dictate, endeavoured to aggrandize themselves at the expense of their professional brethren. The despotism of this body, however, like the impotent despotism of the Cæsars, has effected its own destruction; and amidst all the evils which this Corporation has effected, there is one consolation remaining, that its power of doing mischief will shortly be at an end. We shall therefore, in the few remarks which we have to make on the work before us, merely inquire how far a College of Physicians is necessary, and not enter into the general question, how it should be constituted.

The object of the work is to shew, that we are over-apothecaried, over-surgeoned, and under-physicianed, and this the author attributes to the baneful influence of the College of Physicians. It clearly appears from the following table, that there is a great disproportion between the different grades of medical men in Paris and London:—

Paris, in 1822, *with* 800,000 *inhabitants.*

Physicians	600
Surgeons	128
Apothecaries	181
	909

London, in 1822, *with* 1,200,000 *inhabitants.*

Physicians	174
Surgeons	1000
Apothecaries	2000
Chemists and druggists	300
	3474

The author maintains that this excess of surgeons and apothecaries is injurious to the health and pockets of the people. For he says, that in order "that the 2000 persons who, under a fitting organ-

tration of the profession would be superfluous, may have a living, an adventitious demand must be created; more surgical operations must be performed, and more medicines must be consumed than are either useful or necessary; and the aid of the physician is not resorted to until his services can no longer avail. Thus the interests of every branch of the profession are placed in perpetual opposition to their duties; and the public, whilst the care of their healths and lives cost them nearly three times what it would cost them under a proper organization, or what it costs in any other nation, are maltreated." p. 13. Considering that in Paris each medical man is supported by 900 persons, and in London by 345, being in the latter case one medical man to seventy cases, and that in London the whole reward of medicine being divided among so large a number, it is probable, the average payment being small, a great part of the practitioners must be persons of inferior attainments. The cause assigned by the author for this disproportion, is the monopoly by *usurpation* of the College of Physicians, which we now intend to examine.

It might have been as well if nothing perhaps had been said about usurpation, because, as was observed by a contemporary, (*vid. Globe. paper, May* 23,) "if it be true that the powers exercised by the College of Physicians are clearly usurped, that is contrary to law, and it will be very easy in a court of law to overthrow them. If, on the other hand, it be never intended to overthrow these powers by course of law, but by authority of parliament, an allegation of usurpation will rather embarrass than aid any application that may be made to the legislation. Petitioners may be told, that if usurpation be the ground of their complaint, the courts of law are open to them."

The monopoly of the College of Physicians forms with our author many serious grounds of complaint; it certainly has the power of withholding or granting the license to practise in London, or within seven miles of London, and every person desirous of obtaining this permission, must submit to an examination; but the number of practising physicians in London, is not limited, and all may offer themselves for examination who are medical graduates, and have resided at some university, English or foreign, two years *prior* to having taken a degree. The submission of medical graduates to an examination by the College of Physicians, after having undergone that ordeal previously on obtaining their degrees is objected to by the author, who conceives "that to prohibit improper persons from practice, if any prohibitions independent of the public ought to exist, should be with the civil magistracy." (p. 334.) And in another place, he says, that the graduates of all foreign universities are admitted to practise on the continent of Europe generally, and in America, merely on presenting or verifying their diplomas."—p. 335.

We are obliged to differ from the author, both as to matter of opinion and matter of fact. The power placed in the College, of requiring persons who intend practising in London to submit to an examination, under the existing circumstances of most of the universities, and at a time when degrees may be had with great facility, is, or at least ought to be made one of the most effectual securities we possess against the intrusion of the ignorant and unskilled. It is by far easier to keep a vigilant eye on the proceedings of one body, than over twenty, which would be required to be done, if only the possession of a degree were sufficient to enable a physician to practise; indeed we are at a loss to conceive

why the College of Physicians thinks this examination necessary only for those who practise in, and not for those who reside out of, London. According to the opinion of Chief Justice Mansfield,* "a doctor's diploma does not itself entitle the possessor to practise in the provinces of England. He must be an extra licentiate of the Royal College of Physicians, or medical graduate of an English university."

The provincial physician, unless thus protected, is placed under very humiliating circumstances, and therefore cannot claim rank, and defend himself in courts of law. The College possesses no means of *compelling* persons to submit to this examination, nor has the College of Surgeons any power of obliging surgical students to appear before it; but the latter think an examination from the College gives them a kind of importance in their station in society, and the same feeling might also be excited in the mind of the young physician. It is, however, unfortunate, that the medical graduate of an English University should be thought worthy of being excepted. After arguing against a second examination from the College of Physicians, which, if properly conducted, might be made effectual, it appears very inconsistent on the part of the author to wish to give the municipal authorities, who can never be judges of the young candidate's qualifications, the power of preventing him from entering on practice. Now as to the matter of fact, viz. that the graduates of all foreign universities can practise on the continent of Europe generally, merely by shewing and verifying the diplomas. This is not the case; and in a large part of Germany, more particularly in Prussia, the possession of a diploma is not sufficient to allow a person to practise. The medical graduate has another examination, or rather series of examinations to undergo, before he can venture to practise; and it not unfrequently happens that the physician, who by some "senatus academicus" has been thought worthy of a diploma, is at the final examination (*Staats prufung,*) declared incompetent to deal with the lives of his fellow creatures.

The bestowing the fellowships on the medical graduates of Oxford or Cambridge, is a practice which, however excusable at the time when it originated, ought in this enlightened age to be altered, and indeed the College has, by its own conduct, recently afforded the best argument in favour of an alteration, by admitting among the number of fellows, some who were not educated at either of the English universities. Submit all candidates for fellowships to the severest examinations, but then let them be as open to the man who has studied at Pavia, as to an Oxford or Cambridge graduate. The point, however, in question is, how far this exclusion from the fellowships tends to lessen the number of physicians. Although a fellowship may be esteemed a point of some consequence by the profession, still with the public it can have but little weight; licentiates can practise as well as fellows, and some of them are in the best practice.

It will thus be seen that the monopoly of the College of Physicians is not very alarming, and certainly not the cause of that difference in the several grades of the profession pointed out above. This has its rise from other causes; and in forming a comparison between the state of the profession in England and France, due regard must be paid to the medical education in the two countries, and this alone will be sufficient to explain the difference. That the medical corporate bodies in this country direct the education

* Vide Paris's and Fonblanque's Medical Jurisprudence, Vol. I. p. 17.

of the profession, and consequently exert a considerable influence on the divisions in medical practice cannot be denied; but the one at present *least* deserving of public censure, and which produces the least amount of positive mischief, is the College of Physicians. It possesses power, without any other check than that of public opinion to prevent its being abused; the examinations for permission to practise are too easy, and not sufficiently open, and the leaning towards Oxford and Cambridge too great; but of late years it has not been guilty of such acts of oppression and folly as the other medical corporations; indeed it has one claim of gratitude upon the whole body of surgeons, in effecting a redress of a grievance against which the surgical profession had long and loudly complained in vain.

FOREIGN DEPARTMENT.

ANALYSIS OF FOREIGN MEDICAL JOURNALS.

ANATOMY.*

In England the study of anatomy has been chiefly confined to the description of the situation of the different parts of the human body, or, in other words, to *descriptive* anatomy, whilst *general* anatomy, or the science which teaches us the elements or composition of these parts, has been neglected. This neglect has arisen partly from the supposition, that general anatomy was not absolutely necessary to the physician or surgeon, and partly from the difficulty with which the prosecution of the study is attended. We believe, that up to the present time, very vague notions prevail as to the kind of anatomical knowledge which it is necessary for the medical practitioner to possess, some contending that minute anatomy is necessary, others that it is not. If by minute anatomy is meant an unnecessarily tedious enumeration of processes of bone, ramification of arteries and veins, the distribution of nerves; then we say this knowledge may be dispensed with, but if, on the contrary, by minute anatomy we are to understand the anatomy of structure, then we should say that it is indispensably necessary to the pathologist, for how is he to attain precision in the treatment of disease, if he has no accurate knowledge of the structures which are the subject of it. It must be confessed, however, that the study is surrounded with considerable difficulties. General anatomy is intimately connected with animal chemistry, and whilst the latter continues so little known and cultivated, the former will never make rapid advances.

We will now take a glance at the different systems which have been founded, from which our readers will best judge of the difficulties with which the subject is attended.

Haller admitted three kinds of primitive fibres as the elements of all the organs; these were the cellular, muscular, and nervous fibres. This division was adopted by Blumenbach, but M. Chaussier added to it the albugineous fibre. This division, in some degree merely theoretical, did not change in the least the old mode of studying anatomy. This consisted in bringing into one description all organs resembling each other, and in viewing *en masse* the bones, muscles, nerves, tendons, glands, &c. as if this were the extreme of anatomical analysis. An opinion vaguely mentioned by M. Pinel, laid hold of and cherished by Bichat, gave rise to a most brilliant discovery, and imparted to anatomy the true characters of a science. The organs, which had been up to the present time considered in a mass, are composed of different elements, which are easily discovered by a minute analysis. These elements are always found united in a greater or less number in the body, but each of them is always found in its original character in the organs, to the formation of which it contributes; it presents throughout the same aspect, possesses identical properties, and undergoes the same alterations. Bichat discovered at first a certain number, which he described under the name of membranes, the identity of which he recognized in the different regions of the economy in which he discovered them. He soon found a general inventory of all the solids; he counted the tissues, or elementary systems composing them, and fixed their number at twenty-one. These organic systems are divided into two great classes. The first, generally distributed and every where present, contribute not only to the formation of all the apparatus, but also to that of other systems, and

* Gaz. de Sante. May.

enter into every organized body as a common and uniform base. These are the cellular, arterial, venous, exhalant, absorbent, and nervous systems; this last forms two distinct tissues, the one belonging to organic, the other to animal life. The tissues of the second class, placed in a certain determinate apparatus, strangers to the rest of the economy, have an existence less general, and even sometimes nearly isolated; such are the osseous, medullary, cartilaginous, fibrous, fibro-cartilaginous, muscular of the animal life; the muscular of the organic life, the mucous, serous, synovial, glandular systems, and those of the cutis epidermis, and hair.

This is the history of these tissues, which constitutes general anatomy; quite a new branch of a science, which appeared to be almost perfect. Those who sought an elementary fibre, have found nothing; those who recognized three or four primitive fibres, had only considered a part of the problem, without indicating, moreover, any positive application of it. The chemists who, with the assistance of new re-agents, reduced the whole economy to three substances, fibrin, gelatin, and albumen, and in the last analysis, to carbon, oxygen, hydrogen, and nitrogen, introduced confusion into the science, and commenced by destroying the very organization which they wished to study. Bichat alone studied the organization in the organization itself, and considered its elements in their natural state, just as nature presents them to us. Thus his ideas were rich in important results, and we see continually the happy applications which they have furnished, and furnish every day to the different branches of medicine. However, the nomenclature of the organic elementary tissues, has been modified by different anatomists. Dumas reduced them to four, viz. the cellular or spongy, the muscular or fibrous, the mixed or parenchymatous, and the laminary or osseous. Others, such as Walther, Ducrotay de Blainville, Hensinger, have admitted one generative system, the cellular, from which the other systems are said to be derived by metamorphoses more or less multiplied.

Rudolphi (professor of anatomy to the University of Berlin,) in dividing the solids into simple and composed, admits only among the first the cellular tissue, the horny, cartilaginous, osseous, tendinous, vascular, muscular, and nervous systems; and ranks among the second the vessels, membranes, viscera, and glands.

John Frederick Meckel (Professor of Anatomy at Halle,) in approaching the former divisions of Bichat, and uniting some improperly separated systems, reduced the general tissue to three, the mucous, the vascular, and the nervous, and the particular tissues to seven, viz. the osseous, cartilaginous, fibrous, fibro-cartilaginous, muscular, serous, and cuticular.

At last Beclard, modifying the ideas of Bichat and those of the anatomists which we have just mentioned, brings, under eleven classes, all the organic tissues, which he presents in the following order, 1. Cellular and adipous tissues; 2. Serous membranes; 3. Ligamentous; 4. Vascular system; 5. Glandular ligamentous tissu; 7. Cartilage; 8. Osseous system; 9. Muscular system; 10. Nervous system; 11. Accidental productions.

Through all these modifications, it is easy to recognize the fundamental idea of Bichat; and the efforts which men of the most enlightened minds have made to give this idea the suitable precision, prove that they acknowledge its justice. There is, however, a blank in general anatomy which ought to be filled up, we allude to a physiological and medical history of the humours which form the greatest part of organized bodies. Valuable materials have been already collected on the blood, lymph, bile, &c.; but too much, perhaps, up to the present, has been accorded to the chemical part of this investigation. Bichat remarked, that chemists who analyzed the humours, could only analyze them when deprived of vitality; it is in their vital part that they ought principally to be studied. This study appears difficult, and the microscopic observations to which we have within a few years returned, after neglecting them so long, do not appear to lead so rapidly to certain results. Thus the blood, considered by most as composed of a liquid called serum, in which red globules swim, is, on the contrary, regarded by M. Schultz, from some recent observations, as a homogeneous fluid composed of minute bodies, which move in displacing themselves continually in the torrent of the circulation; a new hypothesis, which M. Dutrochat invalidates by contradictory observations, in attributing the error of M. Schultz to an optical illusion.

PHYSIOLOGY.

Important Physiological Experiments.

In Mr. Charles Bell's Physiological Researches, our readers will recollect that he was the first who discovered that the

division of the branches of the fifth pair, in the face, produced violent pain, and was followed by the loss of all sensation in the part; whilst the division of the portio dura neither produced pain nor loss of sensation, but a kind of paralysis of the muscles of the face. Several physiologists, after this, repeated Mr. C. Bell's experiments; some of them differed from him a little in their results. Magendie declared, that he sometimes observed the animal to manifest signs of pain on the division of the portio dura. Fædera said, that it was always the case. Mayo assures us that he made the same observation on dogs and cats, but not on the ass, which was the animal on which Mr. Bell had tried the experiment. All, however, agreed in one point, that the manifestations of pain were very trifling, and not at all to be compared with those which are observed after the division of the fifth pair, in which respect Mr. Bell's conclusion was supported. Some experiments have since been performed at Copenhagen on this subject; it occurred to some physiologists there, that the slight sensibility of the seventh pair might probably arise from the numerous connexions of this nerve with the fifth pair. In order to decide this, the fifth pair was divided at its origin before the experiment was tried with the portio dura of the seventh pair. The experiments were tried on rabbits, in the Museum of Natural History at Copenhagen, by Drs. Lund and Eschricht, in the presence of Professor Reinhardth, and no account of them has yet been published in this country.

*First Experiment.**—The seventh pair was laid bare on the left side; as the nerve was pinched with the forceps, the animal showed signs of pain and convulsions in the muscles of the face, as well as in all the following experiments, on which account I shall not mention it again.

Second Experiment.—The brain was laid bare, and the left hemisphere was removed; the fifth pair on the left side was wounded close to the dura mater, and, amidst the most violent cries of the animal, divided. Every trace of feeling disappeared on the left side; the eye lost its glistening appearance, whilst on the other side the face had preserved its natural feel and the eye its usual look. The seventh pair was then divided on the left side; after twitching the nerve with the forceps, convulsions of the body came on very frequent, followed by a bending of the body towards the side affected, accompanied also with evident signs of pain. The animal was killed, and on examination the 5th pair was found completely divided on the left side; the injury done to the brain was very slight.

Third Experiment.—The calvarium was removed, and the fifth pair divided as in the preceding experiment. The face remained, on the left side, without feel, and the eye dull but more glistening than in the preceding experiment. The seventh pair was then laid bare on the left side; the nerve often pulled the forceps, being always carried from before backwards; but *the animal did not manifest the slightest sign of pain.* Now the seventh pair on the right side was exposed, and every time when it was touched with the forceps the animal evinced most unquestionable signs of pain. These experiments were often repeated on both sides with the same success. The animal, still lively, was killed, and on examination the fifth pair was found completely divided, about a line posterior to the part where the division took place in the preceding experiment, before the nerve had entered the fold of the dura mater.

Fourth Experiment.—The brain was opened, and the fifth pair divided on the left side. The seventh pair was then laid bare on the right side; the pinching of this nerve with the forceps produced signs of severe pain. The nerve was then exposed on the left side, but the pinching of the nerve did not cause the slightest trace of pain in the animal, till we reached just below the meatus auditorius externus; from this point backwards the touching of the nerve was followed by convulsions in the whole body. The animal was killed, and the fifth pair of the

* By the seventh pair, foreigners mean the portio dura; for they never say the portio dura of the seventh pair, as they make the portio dura and portio mollis two distinct nerves, the one the seventh the other the eighth pair.—Ed.

left side was found cut into in two places, but not completely divided.

Fifth Experiment.—This failed; for after opening the brain, removing the left hemisphere, and dividing the fifth pair, the animal was nearly dead.

Sixth Experiment.—The fifth pair on the left side was divided, as in the preceding experiment. The left side of the face was insensible to touch The seventh pair was laid bare, on the right side, under the most violent convulsions of the body. The pinching of the nerve produced violent movements in the body, and drew from it cries. As we exposed the seventh pair on the left side, the animal manifested signs of pain as the incision was carried behind the ear. Now the branch going to the lower jaw was first divided, but the animal showed no sign of pain, nor any as the anterior part of the principal branch was pinched, but as soon as we did this with the nerve just below the meatus auditorios externus, and still farther behind, we perceived signs of most violent pain.

From these experiments the following conclusions may be drawn:—

1. That the seventh pair really possesses sensation, and that in no trifling degree.

2. That the division of the fifth pair takes away the sensibility in that part of the seventh pair, which lies before the external meatus.

3. But that the sensibility continues after this operation in that part of the nerve which is situated behind the meatus auditorius externus.

The causes of the continuance of feeling in the posterior part of the seventh pair, after the division of the fifth, are not difficult to explain.

The seventh pair, as we all know, anastomose behind with the first cervical, and consequently stays in connexion with the nerves of sensation, as in front with the fifth pair. There is then no doubt that the seventh pair is indebted for its sensation, in the posterior portion, to its connexion with the cervical nerves, and anteriorly to its connexion with the fifth. In order to prove the first opinion, the connexion of the seventh pair with the cervical nerves must be destroyed.

As it is apparent, from these experiments, that the seventh pair derives its sensation from connexion with the nerves of sensation, Mr. Mayo's hypothesis about a sensation peculiar to the nerves supplying the muscles "muscular sensation," will at least not hold good for one o the most important nerves of this class.

SURGERY.

Removal of the Clitoris.

About three years ago the clitoris was removed by Professor Graefe, of Berlin, in a case where the female was addicted to onanism in a great degree; the person was also idiotic, and this practice was supposed to have had the effect of increasing and keeping up the mental affection. All other means failing of preventing the vicious habit, the clitoris was removed; and since that time the patient has been recovering the use of her faculties.

The removal of a too long clitoris, on account of the impediment caused to coition, is mentioned by Talpine, Plato, Rhodius, Columbus, and Haller. It was in use in the fifth century, among the Egyptians, where this diseased formation of the female organs of generation was very frequent, as mentioned by Ætius. (Ætil iv. Tetrab. Serm. iv.) The operation belongs to one of the easiest in surgery; the part is fastened with the left hand, and with the right is cut away. Among the ancients this operation was performed in a still more painful manner; the part was fastened with a serrated forceps and pulled downwards, which caused great and unnecessary pain. Ballonius says, that in the Orient it was the custom to burn carcinomatous clitorides and indurated nymphæ.—*Graefe's and Walther's Journal.*

THE MEETING AT THE HUNTERIAN MUSEUM.

To the Editor of THE LANCET.

SIR,—In your account of the last meeting of the Trustees of the Hunterian Museum, I am said to have contrasted the liberal manner in which the museum at Berlin is conducted "with the narrow-minded and interested policy of the curators of the London College, and that no less distingnished and scientific body the Court of Examiners." You will, I am certain, allow me an opportunity of assuring your readers that I never mentioned the Court of Examiners; and that, while I contrasted the free access to the continental museums with the difficulties of profiting by the Hunterian, I did not employ the epithets narrow-minded or interested, or stigmatise any set of men or any individual. As your report must have been collected from conversations in which our proceedings transpired, or been furnished by some gentleman present from memory, and as the greater part of the profession use strong langnage respecting the ruling body of the College of Surgeons, I do not wonder at the error, nor at all complain; but am desirous of furnishing a correct account of my conduct, from being a member of the College of Physicians. My business respected the Museum. With the Court of Examiners I had no concern, and, had it been necessary to mention them, I could not have called their attainments in question, because some of them are among the most distinguished surgeons in Europe and have reached an eminence in their department of the profession which I can never hope to reach in mine; and, had such remarks been merited and in place, they should not have fallen from me—an examiner at the College of Physicians.

I acted merely as a trustee of the Museum; and, in that office too, I considered not men but measures. I never mentioned the curators by name nor censured them, but exerted myself for new measures. When I became a trustee, in virtue of my office as censor of the College of Physicians, I absented myself from the two first quarterly meetings, lest, as a member of one college, I should excite unpleasant feelings in the members of the other, thinking, at the same time, that the meetings were only formal, and that others would transact any little business which might occur. Finding, however, from the complaints throughout the profession, that something was wrong, I determined to attend the third, not knowing, nor inquiring, who were the trustees or who the curators; nor advising with any one; nor intending to do more than ask, whether the Museum could not be thrown more open; and a catalogue be immediately prepared.

The Duke of Somerset and Mr. Davies Gilbert, M.P., Dr. Ager and Dr. Ramadge, were present. The last gentleman anticipated me in starting the subject, but I continued it, and urged the necessity of free access to the Museum, and of a catalogne, stating the universal dissatisfaction throughout the profession, although I did not say, as appears in your Number of May 13th, that the curators had shown *no* disposition to render the Museum useful to the public. I regretted to observe that Mr. Clift, who is an excellently informed and estimable man, was much annoyed. He informed us, that he was the only person sufficiently acquainted with the Museum to form a catalogne, (so that his death would render the Museum almost useless,) and that in forming a catalogne no one could assist him. I remarked, that so important a matter should never have been allowed to become dependent upon the frail existence of a single individual, and that others should instantly be trained to assist in explaining the collection and in preparing the catalogne. He replied, that others would probably not like such an occupation, (as if proper remuneration would not induce hundreds of able men to apply for it,) and that his son had been so trained. He said, in answer to a question from me, that he should be at least seven or eight years in making a catalogue, with all his time devoted to the object; and that, if he were obliged to show the Museum twice a week, he should be much longer, adding, that the fatigue of showing it was considerable, there having been sixty visitors on the last day, but forgetting that this was a powerful argument for more frequent access,—that if it were open more frequently, there would not be so large a number on one day; that a descriptive catalogue would render the labour of a demonstrator very trifling; and that it is utterly impossible for persons to profit by the Museum, if they cannot study any part of it they please at their leisure, but are led round in a crowd, peeping over each others shoulders and catching the words of the demonstrator as they can. I have known gentlemen wait nearly an hour because there was not a sufficient party collected for Mr. Clift to start round the Museum with. He showed us some volumes of extracts, which he is making

from MSS. of John Hunter's, respecting cases of disease. These were the commencement of his labours in the catalogue, selected at *his* discretion, who is not a practical man, relating some to preparations, *some not*, and written by him, most laboriously, in a fine copper plate hand. It was evident that this was an utter waste of time. He had only to mark with a pencil what was to be copied, some poor boys might then make the copy, and this be sent to the printer, for a single copy is of little use, and printers require only an intelligible MS. The world will hardly credit that Mr. Clift rises early and retires late to rest in order to make a single exquisitely written copy of some Hunterian MSS. Mr. Clift's annoyance hurt me, and to show that I considered the affair as mere business and had no personal feeling, I invariably spoke to him as mildly as was in my power. But all the trustees saw the matter in the same light, and the Duke of Somerset drew up a resolution,—that a catalogue be prepared without delay, and that the Museum be open twice a week all the year, provided no reason to the contrary were given by the curators, who were summoned to meet us that day fortnight.

At this second meeting, besides the trustees formerly present, there were Lord Colchester and Sir Everard Home, the latter of whom had been elected a trustee as J. Hunter's executor. We found Lord Colchester of the same opinion as ourselves, and that he had strenuously exerted himself in vain for many years to procure a catalogue. He showed that we were perfectly right in resolving that the Museum should be open twice a week all the year, for these were the terms of the bond originally entered into between government and the trustees. It was remarked, that, as the Museum had been opened but once a week, and that not all the year, the trustees had not done their duty, and Sir E. Home replied, "No, we have not done our duty," and yet moved that it should be open no oftener than before, and the matter left to the curators, as best knowing how to manage the Museum. A motion for a breach of duty was not seconded but scouted, and Lord Colchester drew up a resolution, that the Museum be opened twice a week, (without any consultation with the curators,) as the bond required admissions *at least* as frequently as this. I gave it as my opinion, that the Museum should be open four times a week, and his Lordship did not dissent, but conceived it would be as well, in the first instance, to comply with the terms of the bond, merely adding, however, to the resolution, that if the members of the College of Physicians or Surgeons applied for more frequent admissions, we would *instantly* take the subject into consideration. The resolution was carried unanimously.

I was anxious to have it clearly understood what was meant by the Members of the College of Surgeons, and informed the civil trustees that the members of the College have no part in the transactions of the College—are never assembled to elect officers or receive statements of accounts—are, in fact, mock-members, and should be termed licentiates, never entering the building except to see the museum or hear the lectures,—privileges enjoyed by strangers, and that therefore we could never have an application from the College of Surgeons on the matter. Sir E. Home angrily asked, how they were to be assembled, six thousand as they were? I replied, that the propriety of this state of things was not the question; that I merely stated the fact, in order to show that no application could come from the members of the College in their corporate capacity, and therefore hoped that an application from any number of members, however small, in their individual capacity, would be regarded sufficient. To this his Lordship and the other trustees instantly consented.

On the subject of the catalogue, I observed that the portion relative to natural history must be complete, as I had seen a report of the curators, made many years ago,—that three parts by Dr. Shaw were now ready; and another, dated ten days subsequently,—that the remaining fourth was ready. But Sir E. Home replied, that this went for nothing, for the portion mentioned was very incomplete. He urged how he had laboured for ten years at the catalogue. Yet all we could find as the result of his labours, and those of others, were a few pages of a folio book, which one of the civil trustees afterwards shook between his finger and thumb with signs of contempt. I suggested the propriety of employing a number of persons to make the catalogue and paying them, as the funds of the College ought to be most ample, when Sir E. Home said, they had no money for such purposes, and angrily asked, "where the devil the funds were to come from, and whether he and the rest of the examiners ought not to be *well* remunerated for spending their time in examining candidates." I answered, that it was of no importance whether the College had funds or not, (it is universally said that the receipts from candidates are enor-

moss, and the *necessary* expences comparatively small, but this it was not my province to mention,) for government had acted most liberally, and would doubtless supply any sum which might be requisite. This was confirmed by one of the civil trustees; and another remarked, that many years ago money was offered to the curators for the purpose, who said, "No, we do not want it; leave us alone, and we will make a catalogue." Even yet they have no catalogue, and now, on asking why they do not employ persons to make one, we are told, they have no funds!!

The curators, however, had been waiting some time, and requested to be admitted, as they had other engagements, and we accordingly received them previously to passing any resolution respecting the catalogue. *Before they could enter the room, Sir E. Home departed by another door.* We all received them standing, as gentlemen, with every mark of respect, yet Sir William Blizard, who began an address, setting forth the past and future labours of the curators for the public good, instantly committed an evidently studied insult upon the three medical trustees, by saying, that the labours of the curators were well known to the *permanent and noble minded trustees*, forgetting that his Majesty's ministers are only official trustees, and that the burner of the Hunterian MSS. is a permanent and noble-minded trustee. These expressions he repeated, and had clearly prepared for the occasion. Yet to show that we had no personal feeling like himself, we took no notice of his conduct. In panegyrising Mr. Clift's industry, he showed us the absurd copies of J. Hunter's MSS. making by Mr. Clift, and, on Dr. Ramadge attempting to offer some remark upon the waste of time in such a work, fiercely told him he knew nothing of the matter, forgetting that he was summoned to attend us solely to receive our instructions. And he deviated still more from his place in telling the civil trustees that their proceedings had actually, positively, appeared in that infamous (and his agony was great at this moment)—in that infamous (he repeated) publication, THE LANCET.

Mr. Abernethy then rose, and also forgot his place, and gave way to personal feeling so far as to remark, that he wondered that medical men—that medical men (he repeated, raising his voice) should be led away by popular clamour, thus not wondering at all that the civil trustees should be led away by popular clamour, and accusing the medical trustrustees of acting not from reason or a sense of duty. Yet we made no reply to this, so anxious were we to show no personal feeling. Mr. Abernethy (who is often called honest John Abernethy) urged us strongly to open the museum no oftener than before; in fact, to violate the bond, when Lord Colchester remarked, that if his object in addressing us was no other than this, he might save himself the trouble, as we had settled that point before we admitted the curators. Mr. Abernethy accordingly sat down, saying to Lord Colchester, that, if we ordered them to open the Museum twice a-week, of course they must do so.

To prove still further the desire of the medical trustees to confine themselves to the prosecution of public utility, I may mention, that, as the College Lectures were established to illustrate the Museum, they fall under our cognizance, and that the complaints of the members at being admitted to their own theatre by a back way might have been listened to by us with propriety. Yet we were silent upon the subject, as one rather relating to the College than the Museum; and it was a civil trustee,—Lord Colchester, who asked the question of the curators,—whether it was true that the members were so admitted; and when the venerable Mr. Cline, whom I have always regarded as the supporter of generous measures and liberal views, rose to defend the ungracious admission, by contending that the theatre was situated in Portugal-street, not in Lincoln's inn-fields, and that the shortest way to it was by Portugal-street, and assured his Lordship that the door way was good, the staircase clean, and the accommodation in the theatre excellent, we preserved our silence, neither showing the fallacy of his first argument, nor the total want of relation in the latter circumstances to the ground of complaint.

The interview was now at an end. The curators withdrew, and but one feeling prevailed among the trustees, civil and medical, that the conduct of the curators was puerile (an expression used by a civil trustee,) and that, if they were left to themselves, no catalogue would ever be seen. I gave it as my conviction, that a catalogue might with ease be prepared in a twelvemonth, and probably in a much shorter time, as the Museum is in perfect order, and Mr. Clift fully acquainted with it; that he had only to stand before the preparations with one or more shorthand writers at his elbow, who should take down his description, and write them out in the evening; and that a hundred preparations might thus be entered in the catalogue in a day. Lord Colchester then

moved that the curators be instructed to begin the preparation of a catalogue immediately, and report to us how long its completion will require, and, for the purpose of keeping them to the work, quarterly show us their progress in it and report how long it still requires for completion. This was unanimously carried. The civil trustees shook their heads at the conduct of the curators, expressed their conviction that the Museum was made a *mere show*, instead of a place of study, and that other people should be employed as showmen in the place of Mr. Clift, and he devote himself to a labour of permanent utility—the preparation of the catalogue. They declared their disapprobation of Mr. Clift gratifying his vanity, not only by showing the Museum, but by copying the MS. formerly mentioned in such a laborious manner, adding, that it was a disgrace to him to copy in so fine a hand. I may remark, that the curators appear to have no idea of what is required. Mr. Clift is to be employed in making an exquisitely written MS. catalogue, which will remain in the Museum after his death as a monument of his talents and industry. But the public require a printed catalogue, which they may purchase at the College at the cost price, and which will enable them to study the Museum at leisure, without a demonstrator.

We had been occupied two hours and a half, and several had other engagements, so that there was no time for further business. But, before breaking up, I urged the propriety of making the Museum more easily accessible to individuals. At present none but trustees, fellows of the College of Physicians, and members of the College of Surgeons, have a right to see the Museum without an order. The trustees and curators only can give written orders; and the fellows of the College of Physicians and members of the College of Surgeons can only introduce friends personally. I proposed that licentiates of the College of Physicians should also have free admissions, and that all persons having free admissions should be empowered to give written orders of admission. Abroad, all persons are admitted, drawings may be made, and, when a person is prosecuting any one subject, he is admitted even on the days the Museum is closed to the public. The consideration of this change, however, was reserved for another meeting.

I have *not scrupled*, Sir, to give you this detail, because Sir William Blizard's horror at our proceedings appearing in THE LANCET was witnessed with indifference and afterwards smiled at, and because imperfect accounts of our proceedings are in circulation. I have been *anxious* to communicate them, that the world may see that the medical trustees have had no other motive than public duty, and that, while the inertness of the curators and the trustee, Sir E. Home, was calculated to disgust, their rudeness to irritate, and the deviation of the curators in our interview from the plain matter in hand to give us no favourable opinion of their habits of business, we did nothing which could furnish them with a shadow of a reason for complaint; that the medical trustees were cordially joined in every thing by the civil, notwithstanding they have all the odium of having done their duty; and that, in fact, the resolutions of the first meeting were proposed by the Duke of Somerset, and of the second by Lord Colchester. So noble, indeed, was the conduct of the civil trustees, so anxious were they to set things right, that, at the close of the meeting, I assured them they could have no idea of the gratitude with which their conduct would be viewed by the whole profession, and begged leave myself to thank them most sincerely. They replied that they had done nothing but their duty.

I have the honour to remain,
Your obedient servant,
JOHN ELLIOTSON.

Grafton-street, Bond-street,
June 14, 1826.

SUCCESSFUL APPLICATION OF THE STOMACH PUMP.

To the Editor of THE LANCET.

SIR,—Should you consider the following case calculated to interest your readers, you will perhaps be good enough to give it a place in your valuable journal. It evinces most clearly the propriety of having immediate recourse to the syringe in cases of poison, without trusting to the effect of other remedies.

I remain, Sir,
Your most obedient servant,
GEORGE BEAMAN.

28, James-street, Covent-garden,
June 19, 1826.

On Saturday, June 17, between four and five o'clock in the afternoon, a messenger required my immediate attendance upon a lady who had, about a quarter of an hour before, taken an ounce of laudanum; neither my partner nor myself being in the way, our assistant, Mr. Wells, immediately obeyed the summons,

(taking with him the improved stomach pump, manufactured by Mr. Weiss in the Strand,) and on arrival found, that the effects of the opium were beginning clearly to manifest themselves; without the smallest difficulty he introduced the tube into the stomach, and was fortunate enough, aided only by two female domestics, to manage the instrument so readily, that in a very few minutes the contents of the stomach were completely evacuated.

Within one hour of the commission of the act, I came home, and lost no time in repairing to her house. There was at that time *a very slight* disposition to drowsiness, her pupils not dilated, and the pulse 98, and soft. I examined two wash-hand basins, containing the fluid, &c. which had been withdrawn from the stomach; in the first, a considerable quantity of the laudanum, mixed with the mucous secretion, and a small quantity of food, were at the bottom. The second basin exhibited scarcely any improper appearance. It appearing to me that the whole of the poison had been effectually got rid of, I only directed the forehead and temples to be frequently bathed with vinegar and water, and the patient to be roused and walked about, should there be any disposition to sleep. At nine o'clock I again called upon her; she had taken some tea, and appeared comfortable. A purgative was now administered.

On the following morning she was attending to her domestic affairs, as well as if no such occurrence had transpired, and I am also happy to add, most sorry for the crime, which in an unguarded moment (from an imaginary cause) she had committed.

In this instance, I am sorry to say, although the phial was labelled laudanum, it was not marked *poison*, and I am informed that no questions were asked by the chemist from whom it was procured.

ADULTERATION OF DRUGS.

To the Editor of THE LANCET.

SIR,—As the avowed objects of "THE LANCET," are the advantage of the profession, and the good of mankind, I trust to the principles of your publication for the insertion of this letter.

Medical men are aware of many adulterations of drugs by their vendors. And as most of them are acknowledged to be of very little, and others of no importance, they are assented to by one party and practised by the other.

But there are other adulterations which are of the greatest moment, that are more dangerous, as they are of the most efficient articles in the "Materia Medica;" and still more so as they are not suspected.

I subjoin a list of the medicines, and their most common adulterations; leaving it to some of your ingenious correspondents to suggest a remedy for this very general and enormous evil to the public and to the profession.

I am, Sir, yours, &c.

A GENERAL PRACTITIONER.

Articles adulterated.

Calomel with Sulphate of Lime; Opium with Spanish Juice; Sulphate of Quinine Starch; Iodine with Charcoal: Croton Oil with any fixed Oil; Tartarized Antimony with Super-acetate of Potash; Epsom Salts with Glauber Salts; Magnesia with Chalk; Elaterium with the fæculent Matter of the Preparation; Blistering Plaster with Linseed Powder; Prussic Acid is a preparation of such variable quality, that a fatal dose of the acid obtained from one druggist, may be given tripled, with impunity, when purchased of another.

HOSPITAL REPORTS.

GUY'S HOSPITAL.

The following cases were admitted into the Hospital on 31st of May, under the care of Mr. Bransby Cooper.

Disease of the Thigh Bone.

The patient in this case is a delicate looking lad, about eleven years of age. He had a severe attack of measles three months ago, which left him much debilitated. Whilst in the stage of convalescence, he was attacked with pain in the lower part of the left thigh. He found the pain increase on motion, and the part (to use his own expression) "felt weakened." In a short time a distinct swelling formed on the inside of the thigh, low down; this being punctured, a small quantity of blood only escaped.

There is now an ulcer of about the size of a shilling, with exuberant granulations, a short distance above the internal condyle of the femur. Around the ulcer, to a considerable extent, there is dark co-

loured inflammation; on tracing the thigh bone, we find it increased to about three times its natural size; the thickening extends more than half way up the bone. There is a constant dull aching pain in the limb, and it is tender upon pressure, Mr. Cooper considers that the disease will go on to the production of necrosis, although, on passing a probe through the ulcer, there is not, as yet, any direct evidence of diseased bone.*

The treatment hitherto employed has been principally constitutional; it is as follows:

Quicksilver, with chalk, 3 *grains*;
Dover's powder, 5 *grains, to be taken night and morning*;
Powder of sarsaparilla, 2 *scruples, to be taken three times a-day.*

A poultice of linseed meal has been applied over the ulcer.

Superficial Ulcer on the Leg.

This occurs in a man 60 years of age; it is extensive, but superficial; has been of six month's standing, and originated from a bruise. Under the use of linseed meal poultices with black wash, applied on pieces of lint, the sore has nearly healed.

Ulcer of the Leg.

This second case differs materially from the preceding one. There is an ulcer of the size of a halfpenny over the lower part of the tibia, with large and unhealthy looking granulations; the parts around are much thickened, more especially about the ancle, but there is no perceptible periosteal thickening along the shin. The patient is 30 years of age; he has been a resident in warm climates, and has taken mercury freely. He says that the parts inflamed spontaneously, when abroad eighteen months ago, but the ulcer has only existed two months. Linseed meal poultices are applied over the part, and the following medicines were prescribed:

Extract of sarsaparilla, 1 *drachm*;
Decoction of ditto, 2 *ounces, to be taken three times a day*;
Plummer's pill, 5 *grains, to be taken at bed time.*

Permanent Stricture of the Urethra.

The following case affords a good example of stricture of the urethra produced by external violence:—H. W., a waterman, ætat. 21, was admitted on account of difficulty in voiding his urine. The patient states, that about six weeks ago, he fell across the edge of a boat, which, passing between his legs, struck the perineum violently. A considerable quantity of blood flowed from the orifice of the urethra, at the time of the accident, and he continued for some time after to pass bloody urine. In a short time he found an impediment to the flow of urine, and the obstruction went on gradually increasing. At the time of his admission, the urine flowed in a small spiral stream.

A sound was passed without much difficulty into the bladder, but its passage gave considerable pain. There was a tolerably firm stricture at the back part of the bulbous portion of the urethra.

June 5. On visiting the patient to-day, we find that he passes his urine in a full stream. The sound has been introduced almost daily since his admission, and the obstruction appears to be quite removed. The man will leave the hospital in the course of a few days.

Sloughing of the Soft Palate from the inordinate use of Mercury.

Edward Burke, ætat. 33, was attacked four months ago with swelling of the submaxillary gland, for which various remedies were tried, until at length mercury was exhibited, and ptyalism induced a short time before his admission into the Hospital. He was exposed to cold whilst under the influence of mercury, and shortly afterwards was attacked with sore throat.

On examining the throat, we find an erythematous blush pervading the tonsils and back part of the pharynx. At the back part of the soft palate is an ulcer of the size of a shilling, immediately above the uvula. It is covered with a yellowish slough, and surrounded by a dark coloured inflammation. The patient has had no syphilitic affection during the last ten years; the submaxillary gland continues enlarged.

Under the following plan of treatment, the ulcerative process has been arrested, and the parts have assumed a healthy appearance. The ulceration has, however, extended through the soft palate, forming an opening immediately above the uvula.

Extract of sarsaparilla, 1 *drachm*;
Decoction of ditto, 2 *ounces*;
Oxymuriate of mercury, 1-16*th of a grain, to be taken three times a-day.*

A large blister was applied to the throat, and the nitrous acid gargle frequently used.

* It has long been observed, that after small pox, measles, typhus fever, &c. the bones are often attacked with necrosis.

The only remaining case which we shall notice amongst Mr. Cooper's admission of male patients, is the following:

J. Ball, ætat. 37, of cachectic appearance, has been accustomed to work in damp cellars. About four months ago, he was attacked with rigours, succeeded by fever and pain in the right side. A swelling gradually formed above Poupart's ligament, which continued many weeks. On the day of admission, fluctuation being very perceptible; an opening was made, and a considerable quantity of pus escaped, and a few days afterwards another opening was made. The parts continue to discharge freely; the abscess does not appear to be deep seated. The poor man's general health is much affected. He has cough and expectoration of a suspicious character.

In addition to the foregoing cases, Mr. Cooper admitted a young man with disease of the metacarpal bone of the thumb. This case has given rise to much difference of opinion as to its nature. We have taken notes of present appearances and *present opinions*, and we will report these with the further progress of the case at some future period.

Cancer of the Mamma.

The following case of cancerous disease of the female breast was amongst Mr. Cooper's admissions. It has unfortunately arrived at the stage of ulceration, with extensive glandular disease in the axilla, so that all possibility of relief by an operation is shut out. And all that remains to be done is to palliate symptoms—to smooth the path to death. The patient is 55 years of age, a married woman, but has borne no children. She ceased to menstruate a few months ago. The disease has existed six years, first making its appearance as a small tumour, and it has been in a state of ulceration upwards of eighteen months.

There is a chasm in the left breast, of the size of the palm of the hand; the edges of which are hard and irregular, but not everted. The surface is for the greatest part sloughy. She suffers excruciating pain in the breast. The hand and arm of this side are much swollen and œdematous. The glands in the axilla are a mass of disease, and the glands above the clavicle are also affected.

Since the patient's admission into the Hospital, the hemlock poultice has been applied to the breast, and it has certainly produced a diminution of pain in the part. The surface of the sore looks cleaner, and has now those large hard fungous granulations so characteristic of a cancerous ulcer.

It may readily be conceived that the patient's general health is much affected. She has a cadaverous hue of countenance, with a hectic state of system. The swelling of the left arm has increased since her admission. An opiate is given at bed time, and a bark mixture with acid three times a day.

Disease of the Spine.

The patient labouring under this affection is a sickly-looking child, six years of age. We find on examining the spine, an unusual projection of the spinous process of the 12th dorsal vertebra.

Pressure on the projecting process, or on any other part of the spine, does not appear to excite much pain, nor does there appear to be any other deformity in the spinal column. The child runs about, but appears to be awkward and stiff in his motions, particularly in the act of stooping. The libs are also dragged along in an unnatural manner. The mother states that she has perceived the projection of bone about six months.

(Mr. Cooper on visiting this case strongly impressed on the mother the propriety of removing the child to a healthy atmosphere, and recommended sea-bathing.)

An issue was directed to be made on each side of the spine, with the potassa fusa.

Quicksilver with chalk, 3 *grains*,
Powdered Rhubarb, 5 *grains*;
to be taken twice a week.

A mixture with tincture of bark and small doses of the oxymuriate of mercury, to be taken three times a day. The recumbent position to be strictly observed.

Disease of the Hip.

This is a case of incipient disease of the hip joint, occurring in a young girl and is characterised by the pain evinced on taking any exercise which renders the motion of the hip necessary. She has in addition, great pain in the knee of the affected side. The patient is 16 years of age, and the disease is of one year's standing.

The following plan of treatment has been adopted:

The tartar emetic ointment rubbed in over the joint, so as to produce a copious crop of pustules.

Quicksilver and chalk, 3 *grains*,
Powder of rhubarb, 5 *grains*,
Carbonate of iron, 10 *grains*;
to be taken three times a day.

Tumour on the Ilium.

S. K., ætat. 30, a woman of irregular habits, admitted on account of a tumour on the upper and back part of the left ilium. It is of the size of a hen's egg, immoveable, very firm, and apparently connected with the bone. She has had pain in the back for two years, but the tumour only made its appearance two months ago. Mr. Cooper considers it to be an exostosis, and has directed the repeated application of blisters.

Mr. Cooper admitted two other female cases, one of ulcers occurring in a woman of cachectic habit, on the face and scalp, and apparently owing somewhat of their origin to uncleanliness. This case has been cured by the exhibition of Plummer's pill, and sarsaparilla, with small doses of the oxymuriate of mercury. Poultices to the sores. The remaining case is one of extensive destruction of the parts within the mouth, resulting from the inordinate use of mercury. We shall take occasion to report this case fully.

Operation of Lithotomy.

On Tuesday last, a patient of Mr. Morgan's was brought into the operating theatre, and placed upon the table, for the purpose of undergoing the operation of lithotomy. The stone, which had been readily felt several times before, was not to be felt at this time, and therefore, Mr. Morgan postponed the operation. There was a considerable number of pupils assembled on the occasion; Mr. Morgan shortly addressed them, stating his reasons for deferring the operation.

Successful treatment of Psoriasis Palmaria.

We have lately had occasion to see two cases of this inveterate disease, in private practice, which had resisted every plan of treatment, until at length they were cured by the application of the undiluted nitric acid to the parts affected. In one case a single application of the acid was sufficient, the old cuticle was thrown off, and a new and healthy membrane soon reproduced.

In the second case, the acid was applied twice, sufficient care was not taken to prevent the new cuticle from becoming harsh, and fissures soon formed therein.

It is but right to state that this plan of applying nitric acid for the cure of psoriasis palmaria was suggested by Sir Astley Cooper, and in a case which was some few months since in Guy's Hospital, under the care of Mr. B. Cooper, a similar treatment was adopted with a successful result.

ST. THOMAS'S HOSPITAL.

The following cases were admitted into the Hospital by Mr. Tyrrell on Thursday May 25th. They are few in number and unimportant in their nature, but in compliance with our recently adopted plan, we shall briefly notice them.

Disease of the Hip Joint.

J. B., a delicate looking boy, six years old, has great pain in the hip joint on motion. He lies in bed with his knees drawn towards the abdomen, and on drawing them down, he complains of excruciating pain. He has also one symptom, which is so characteristic of disease in the hip, viz. pain in the knee, the affection is of five months standing The following treatment has been pursued. Ten leeches applied over the joint; a blister to the same part, and this having healed, the tartar emetic ointment has been applied so as to produce a full crop of pustules.

Quicksilver with chalk, 3 grains, to be taken twice a day.

There is also a case of *affection of the hip joint*, occurring in a young man. He received an injury to this part about six months ago, since which he has experienced great pain. Since he has been in the Hospital he has been cupped twice, and blisters have been applied over the hip, from which he has derived much benefit.

The two remaining male cases are *an affection of the tarsal ligaments*, and *strumous ulcers on the leg*, on which it is unnecessary to make any remarks.

JEMMY JOHNSON.

COURT OF COMMON PLEAS,

Westminster, June 21, 1826.

WAKLEY, v. JOHNSON

In our next Number, we shall publish a Report of the Proceedings in this Trial; meanwhile we bid our *friend* and *brother libeller* JEMMY JOHNSON good night.